

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

ROBERT "BOB" BURNS – Chairman
BOYD DUNN
SANDRA D. KENNEDY
JUSTIN OLSON
LEA MARQUEZ PETERSON

IN THE MATTER OF THE APPLICATION
OF ARIZONA PUBLIC SERVICE
COMPANY FOR A HEARING TO
DETERMINE THE FAIR VALUE OF THE
UTILITY PROPERTY OF THE COMPANY
FOR RATEMAKING PURPOSES, TO FIX A
JUST AND REASONABLE RATE OF
RETURN THEREON, TO APPROVE RATE
SCHEDULES DESIGNED TO DEVELOP
SUCH RETURN.

DOCKET NO. E-01345A-19-0236

**STAFF'S NOTICE OF FILING
SURREBUTTAL TESTIMONY**

Staff of the Arizona Corporation Commission ("Commission") hereby files the Surrebuttal
Testimony of Ralph C. Smith, David C. Parcell, David E. Dismukes, Ph.D., Margaret ("Toby") Little
and Matthew Connolly in the above docket.

RESPECTFULLY SUBMITTED this 4th day of December 2020.

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CERTIFICATE OF MAILING

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BEFORE THE ARIZONA CORPORATION COMMISSION

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Chairman

BOYD DUNN

Commissioner

SANDRA D. KENNEDY

Commissioner

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ARIZONA PUBLIC SERVICE COMPANY FOR)
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PURPOSES, TO FIX A JUST AND)
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THEREON, TO APPROVE RATE SCHEDULES)
DESIGNED TO DEVELOP SUCH RETURN.)

SURREBUTTAL

TESTIMONY

OF

RALPH C. SMITH

ON BEHALF OF THE

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

DECEMBER 4, 2020

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EXECUTIVE SUMMARY
ARIZONA PUBLIC SERVICE COMPANY
DOCKET NO. E-01345A-19-0236

The purpose of my Surrebuttal Testimony is to address the Rebuttal Testimony of Arizona Public Service Company (“APS” or “Company”). Specifically, I will be addressing the amount of base rate increase and the adjustments to rate base and net operating income.

BASE RATE REVENUE INCREASE

APS had originally requested a total revenue increase of \$184 million. In rebuttal, APS reduced that to \$169 million, consisting of a revised net base rate increase of \$41 million and \$128 million of net adjustor changes.

On Original Cost Rate Base (“OCRB”), including actual Post-Test Year Plant (“PTYP”) additions through June 30, 2020, and using the rate of return recommended by Staff witness Mr. David C. Parcell, I have calculated a revenue sufficiency for APS of approximately \$68.658 million.

Staff is presenting the Commission with two alternatives for the revenue requirement change on Fair Value Rate Base (“FVRB”) using the Fair Value Rate of Return (“FVROR”) recommended by Staff witness Mr. Parcell. Under alternative 1, a FVROR increment of zero percent is applied to the FVRB increment, consistent with financial considerations set forth in Staff witness Mr. Parcell’s Testimony. Under alternative 2, a FVROR increment of 0.30 percent is applied to the FVRB increment, which is consistent with the fair value legal standard in Arizona.

Under alternative 1, APS has a revenue sufficiency of approximately \$68.178 million. Under FVROR alternative 2, the base rate revenue sufficiency is approximately \$55.235 million. These amounts compare directly to the amounts in APS’s original filing on APS Schedule A-1.

Staff is recommending the use of alternative 2 in this case, which results in a jurisdictional base rate decrease of approximately \$55.235 million, and is consistent with the fair value standard in Arizona. The following table summarizes how Staff’s Surrebuttal results compare with APS’s original Application and with APS’s rebuttal:

Base Rate Increase Inclusive of Adjustor Transfers	APS Proposed - Original Filing		APS Proposed - Rebuttal Filing		Staff Proposed	
	Amount	Percent Change	Amount	Percent Change	Amount	Percent Change
Description	(F)	(G)	(H)	(I)	(J)	(K)
Total Revenue Deficiency	\$ 183,634	5.60%	\$ 168,824	5.15%	\$ 59,808	1.82%
Tax Expense Adjustor Mechanism (TEAM)	\$ (119,252)	-3.64%	\$ (119,252)	-3.64%	\$ (119,252)	-3.64%
Environmental Improvement Surcharge (EIS)	\$ 3,888	0.12%	\$ 3,888	0.12%	\$ 3,888	0.12%
Renewable Energy Adjustment Charge (REAC)	\$ 321	0.01%	\$ 321	0.01%	\$ 321	0.01%
Advanced Energy Mechanism (AEM)			\$ (13,350)	-0.41%		
Coal Community Transition Commitment (CCTC) - Funding to be Determined					\$ ~	0.00%
Net Adjustor Changes	\$ (115,043)	-3.51%	\$ (128,393)	-3.91%	\$ (115,043)	-3.51%
Net Base Rate Increase (Decrease)	\$ 68,591	2.09%	\$ 40,470	1.23%	\$ (55,235)	-1.68%

ADJUSTED RATE BASE

I recommend the following adjustments to the OCRB and FVRB proposed by APS (amounts are in thousands of dollars):

Summary of Staff Adjustments to Rate Base		Original Cost	RCND	Fair Value
Adj. No.	Description	Increase (Decrease)	Increase (Decrease)	Increase (Decrease)
B-1	Post-Test Year Plant - Fossil Generation	\$ 37,075	\$ 37,075	\$ 37,075
B-2	Post-Test Year Plant - Nuclear Generation	\$ (5,591)	\$ (5,591)	\$ (5,591)
B-3	Post-Test Year Plant - Distribution and IT/Facilities	\$ (51,505)	\$ (51,505)	\$ (51,505)
B-4	Post-Test Year Plant - Technology Innovation	\$ (11,259)	\$ (11,259)	\$ (11,259)
B-5	Post-Test Year Plant - Renewables	\$ (7,316)	\$ (7,316)	\$ (7,316)
B-6	Accumulated Depreciation Related to Post-Test Year Plant	\$ 26,671	\$ 26,671	\$ 26,671
B-7	Accumulated Deferred Income Taxes Related to Post-Test Year Plant	\$ (53,741)	\$ (53,741)	\$ (53,741)
B-8	Four Corners SCR Deferral	\$ (269)	\$ (269)	\$ (269)
B-9	AMI Meters for Customer Growth	\$ -	\$ -	\$ -
B-10	Prepaid Directors and Officers Liability Insurance	\$ (145)	\$ (145)	\$ (145)
B-11	Costs for Damaged and Retired McMicken Battery Energy Storage Facility	\$ (1,041)	\$ (1,041)	\$ (1,041)
B-12	Cash Working Capital	\$ 4,957	\$ 4,957	\$ 4,957
B-13	West Phoenix Disallowance	\$ 12	\$ 12	\$ 12
B-14	Property Tax Deferral	\$ (6,103)	\$ (6,103)	\$ (6,103)
B-15	Ocotillo Deferral	\$ 2,686	\$ 2,686	\$ 2,686
B-16	Excess Deferred Taxes	\$ 85,391	\$ 85,391	\$ 85,391
B-17	TEAM Balancing Accounts	\$ 6,556	\$ 6,556	\$ 6,556
B-18	APS Lease Reclassification	\$ -	\$ -	\$ -
B-19	APS RCND Differences	\$ -	\$ (36,331)	\$ (18,166)
	Total of Staff Adjustments	\$ 26,378	\$ (9,953)	\$ 8,212
	APS Proposed Rate Base	\$ 8,872,984	\$ 15,747,542	\$ 12,310,263
	Staff Proposed Rate Base	\$ 8,899,362	\$ 15,737,589	\$ 12,318,476

Each of these adjustments is discussed in my Testimony.

Staff's adjusted rate base and how it compares with APS's is summarized below:

Summary of Rate Base	APS Original App.	Staff Surrebuttal		APS Rebuttal	Remaining Rate
\$000's	Schedule B-1	Schedule B	Difference	Schedule B-1	Base Differences
	(A)	(B)	(C) = B-A	(D)	(E) = B-D
Original Cost Rate Base	\$ 8,872,984	\$ 8,899,362	\$ 26,378	\$ 8,896,268	\$ 3,094
RCND Rate Base	\$ 15,747,542	\$ 15,737,589	\$ (9,953)	\$ 15,734,140	\$ 3,449
Fair Value Rate Base	\$ 12,310,263	\$ 12,318,476	\$ 8,213	\$ 12,315,204	\$ 3,272

The adjusted FVRB has been used by Staff to compute the required base rate revenue requirement.

ADJUSTED NET OPERATING INCOME

I also recommend several adjustments to net operating income, as summarized in the following table (amounts are in thousands of dollars):

Summary of Staff Adjustments to Net Operating Income			
Adj. No.	Description	Pre-Tax Revenue or Expense Adjustment	Net Operating Income Increase (Decrease)
C-1	Miscellaneous Out of Period Costs	\$ (636)	\$ 479
C-2	Injuries and Damages	\$ 187	\$ (141)
C-3	UARG and USWAG Membership Dues	\$ (213)	\$ 160
C-4	Depreciation Expense Post-Test Year Plant At Current Depreciation Rates	\$ (5,002)	\$ 3,764
C-5	Property Tax Expense - Post-Test Year Plant	\$ (934)	\$ 703
C-6	AMI Meters Depreciation Expense	\$ -	\$ -
C-7	Directors and Officers Liability Insurance Expense	\$ (360)	\$ 271
C-8	Incentive Compensation Expense	\$ (18,709)	\$ 14,079
C-9	Executive Compensation - Housing, Retention Bonuses, Financial Planning and Physicals	\$ (242)	\$ 182
C-10	Interest Synchronization	\$ -	\$ 121
C-11	Base Cost of Fuel and Purchased Power	\$ 33,751	\$ (25,399)
C-12	Interest on Customer Deposits	\$ (847)	\$ 637
C-13	Four Corners SCR Deferral Amortization	\$ (73)	\$ 55
C-14	Depreciation Expense - New Depreciation Rates Using SFAS 143 Method for Cost of Removal	\$ (12,134)	\$ 9,131
C-14A	Depreciation Expense - Summary of Company's Test Year Recorded Amounts and Adjustment for New Depreciation Rates and for Non-Studied Assets	\$ (17,265)	\$ 12,993
C-14B	Company Derivation of Estimated Dismantlement Costs with Future Inflation Included in Company-Proposed Depreciation Rates	\$ (6,709)	\$ 5,049
C-15	Depreciation Expense on Post-Test Year Plant - At New Depreciation Rates	\$ (267)	\$ 201
C-16	Expenses Related to Damaged and Retired McMicken Battery Energy Storage Facility	\$ (963)	\$ 725
C-17	Normalize Pension and Post Retirement Employee Benefit Expenses	\$ (12,853)	\$ 9,673
C-18	Adjust for Test Year AG-X Revenue Recovered in the PSA	\$ 15,000	\$ 11,288
C-19	Transmission Expense Correction	\$ 17,576	\$ (13,227)
C-20	TEAM Balancing Account	\$ 656	\$ (494)
C-21	Crisis Bill	\$ 1,250	\$ -
C-22	Ocotillo Modernization	\$ 306	\$ (230)
C-23	West Phoenix Disallowance	\$ -	\$ -
C-24	Annualize Property Taxes	\$ (1,499)	\$ 1,128
C-25	Amortize Property Tax Deferral	\$ (4,081)	\$ 3,034
Total of Staff's Adjustments		\$ (14,061)	\$ 34,182
Adjusted Net Operating Income per APS			\$ 640,218
Adjusted Net Operating Income per Staff			\$ 674,400

NEW DEPRECIATION RATES

For the new depreciation rates to be applied for APS in this case, I am recommending a method for recovering cost of removal/negative net salvage that is based on Statement of Financial Accounting Standards No. 143 ("FAS 143") concepts. This results in lower amounts currently for cost of removal/negative net salvage than APS reflected in its proposed depreciation rates and could help facilitate cost savings if APS pursues securitization of costs related to fossil fueled generation that is projected for retirement. The related adjustments are shown on Attachment RCS-9, Schedules C-14 and C-15.

I have also reflected the two new adjustments to depreciation rates that APS presented in its rebuttal filing: (1) use a six-year (rather than a nine-year) amortization period for the Palo Verde nuclear excess depreciation reserve, and (2) use a 40-year (rather than a 30-year) estimated useful life for solar generation facilities identified by APS as AZ Sun. The related adjustments are shown on Attachment RCS-9, Schedules C-14A and C-14B.

APS DEFERRALS

My Surrebuttal Testimony addresses a request by APS in the current case to continue the Four Corners SCR and OMP deferrals from January 1, 2020, to the effective date of new rates, and to continue to use deferral accounting for property taxes. I also explain that Staff is not proposing an adjustment to APS's rate base for Cloud Computing costs. Staff does not support APS's request to continue deferrals for property taxes.

APS ADJUSTOR MECHANISMS

APS's Rebuttal Testimony presents a Company request for a new adjustor mechanism – the Advanced Energy Mechanism (“AEM”), under which APS proposes to recover amounts related to its Coal Community Transition (“CCT”) commitment, among other costs. I address the Company's request for CCT commitment costs and a limited CCT commitment adjustor mechanism. I also address and recommend against approving APS's proposed AEM.

I also address APS's proposal to continue the TEAM balancing account and to keep lost fixed cost recovery amounts in the LFCR mechanism.

INTRODUCTION

Q. Please state your name, position, and business address.

A. Ralph C. Smith. I am a Senior Regulatory Consultant at Larkin & Associates, PLLC ("Larkin"), 15728 Farmington Road, Livonia, Michigan 48154.

Q. Are you the same Ralph C. Smith who previously filed Direct Testimony in this case?

A. Yes. I filed previously filed Direct Testimony on behalf of Staff in this proceeding on October 2, 2020.

Purpose of Surrebuttal Testimony

Q. What is the purpose of your Surrebuttal Testimony you are presenting?

A. The purpose of my Surrebuttal Testimony is to respond to APS's Rebuttal Testimony concerning the amount of revenue deficiency, rate base and adjusted net operating income. I also address APS's updated proposals for depreciation rates, and APS's proposal for recovery of costs related to the Company's Coal Community Transition ("CCT") commitment. I also address APS's requested accounting deferrals and certain aspects of APS's surcharges/riders.

Q. What APS witness Testimony are you responding to?

A. Generally, my Surrebuttal Testimony responds to issues or topics addressed in the Testimony of APS witnesses Guldner, Lockwood, Snook, Hobbick, Albert, Blankenship, and White.

Q. Please briefly describe the information you reviewed in preparation for your Surrebuttal Testimony.

A. The information I reviewed included APS's Rebuttal Testimony and workpapers, as well as information that was cited in my Direct Testimony, including APS's Application and

1 Direct Testimony, APS's responses to Data Requests ("DRs") of Staff and other parties,
2 information provided to me by Staff, and other publicly available information.

3
4 *Content of Attachments to Testimony*

5 **Q. Have you attached any exhibits to be filed with your Surrebuttal Testimony?**

6 A. Yes, Attachment RCS-9 presents Staff's updated revenue requirement summary and
7 adjustment schedules. Attachment RCS-10 presents APS's responses to Staff DR set 31,
8 which address adjustments presented in APS's rebuttal for the TEAM balancing account.
9

10 **REVENUE REQUIREMENT**

11 *Summary of APS's Requested Increase*

12 **Q. Please briefly summarize APS's basis for its request for a rate increase.**

13 A. Using a test year ending June 30, 2019, with pro forma adjustments in its filing, APS
14 originally sought a net base rate increase of \$69 million, and proposed to remove \$119
15 million Tax Expense Adjustor Mechanism ("TEAM") credit and transfer to base rates \$4
16 million that is currently collected through several adjustor mechanisms for a net adjuster
17 change of \$115 million. The Company's original Application sought a total revenue
18 requirement increase of \$184 million.
19

20 In its rebuttal filing, APS has reduced its requested net base rate increase to \$41 million¹,
21 continues to propose to remove a \$119 million TEAM credit and transfer to base rates \$4
22 million that is currently collected through several adjustor mechanisms, and proposes a
23 new adjustor, the Advanced Energy Mechanism ("AEM"), with estimated funding of
24 approximately \$13 million for the Company's CCT commitment, for net adjuster changes
25 of \$128 million. The total of the \$41 million net base rate revenue increase and the \$128
26 million of net adjustor changes in APS's Rebuttal Testimony produces a total revenue

¹ This amount is shown as \$40.47 million on APS witness Snook's Rebuttal Attachment LRS-01RB, line 18, and on my Attachment RCS-9, Schedule A, column H, line 20.

1 increase of \$169 million.² This is a net reduction of about \$15 million from the \$184
2 million that APS sought in its original Application.

3
4 *Summary of Staff's Recommendation*

5 **Q. What revenue increase does Staff recommend?**

6 A. APS's rebuttal filing requests a \$169 million base rate increase (before transferring existing
7 adjustor mechanisms of \$115 million into base rates and reflecting a new APS-requested
8 AEM adjustor of \$13 million) and a \$41 million net base rate increase (after accounting
9 for that adjustor mechanisms transfer into base rates). In comparison with APS's revised
10 base rate increase request of \$41 million, Staff recommends a base rate revenue decrease
11 of approximately \$55.2 million on adjusted Fair Value Rate Base ("FVRB"). A table
12 comparing APS's requested increase and Staff's recommendation is shown below:
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² See, e.g., APS witness Snook's Rebuttal Testimony, page 12, Table 1, APS Revised Revenue Requirement.

Base Rate Increase Inclusive of Adjustor Transfers and Changes

(Thousands of Dollars)	APS Proposed (Rebuttal)		Staff Proposed (Surrebuttal)	
	Amount	Percent Change	Amount	Percent Change
Description				
Revenue from Sales to Ultimate Retail Customers	\$ 3,280,441		\$ 3,280,441	
Tax Expense Adjustor Mechanism (TEAM)	\$ (119,252)	-3.64%	\$ (119,252)	-3.64%
Environmental Improvement Surcharge (EIS)	\$ 3,888	0.12%	\$ 3,888	0.12%
Renewable Energy Adjustment Charge (REAC)	\$ 321	0.01%	\$ 321	0.01%
Advanced Energy Mechanism (AEM)	\$ (13,350)	-0.41%		
Coal Community Transition Commitment (CCTC)			\$ -	0.00%
Net Adjustor Changes	\$ (128,393)	-3.91%	\$ (115,043)	-3.51%
Total Revenue Deficiency	\$ 168,824	5.15%	\$ 59,808	1.82%
Net Base Rate Increase (Decrease)	\$ 40,470	1.23%	\$ (55,235)	-1.68%
Source: Attachment RCS-9, Schedule A, Page 1 of 2				

The actual rate changes for customer classes will depend on the rate design and therefore likely will differ from the overall percentages shown in the above table. In addition, as discussed in more detail in a later section of my Testimony, Staff is not recommending an initial funding amount for the CCT Adjustor.

Q. What calculations have you presented in support of that recommendation?

A. On Attachment RCS-9, Schedule A, page 1, I present an updated calculation of the revenue deficiency for APS on Original Cost Rate Base ("OCRB"). As shown on Schedule A, page 1, column C, on OCRB my calculations show a jurisdictional gross base rate revenue sufficiency of \$68.658 million. Columns D1 and D2 present a calculation on FVRB similar to the one presented in APS's filing. Staff's recommended decrease of \$55.235 million based on using a Fair Value Rate of Return ("FVROR") increment of 0.30 percent represents a decrease from current base rate revenue from sales to ultimate customers of approximately 1.68 percent.

Staff is presenting the Commission with two options for the FVROR for APS. On Schedule A, page 1, I present Staff's alternative calculations using adjusted FVRB. These calculations show FVRORs ranging from 5.06 percent to 5.14 percent. On adjusted FVRB under Staff's option 1, which uses a FVROR of 5.06 percent, there is a net base rate decrease of \$68.178 million. While consistent with sound financial principles, this alternative may not be consistent with the Arizona Fair Value Rate Base legal standard.

1 Under option 2 the FVROR for APS is 5.14 percent, which results in a net jurisdictional
2 base rate decrease of approximately \$55.235 million.

3
4 Attachment RCS-9, Schedule D, shows the development of Staff's recommended FVROR
5 to be applied to FVRB. The Direct and Surrebuttal Testimony of Staff witness Mr. David
6 C. Parcell also addresses the determination of the FVROR.

7
8 **Q. What base cost of fuel is incorporated in Staff's recommendation?**

9 A. As described in my Direct Testimony, APS's base cost of fuel has been reset to 3.1451
10 cents per Kilowatt-Hour ("kWh"), based on APS's updated forecast.³ APS has indicated
11 in its rebuttal that it accepts this adjustment and APS's has reflected the updated base cost
12 of fuel in its proposed rebuttal revenue requirement.

13
14 *Organization of Staff Updated Revenue Requirement Summary and Adjustment Schedules*

15 **Q. How are Staff's revenue requirement summary and adjustment schedules organized?**

16 A. Staff's updated revenue requirement summary and adjustment schedules are presented in
17 Attachment RCS-9. They are organized into summary schedules and adjustment
18 schedules. The summary schedules consist of Schedules A, A-1, B, B.1, C, C.1 and D.
19 Attachment RCS-9 also contains rate base adjustment Schedules B-1 through B-19 and net
20 operating income adjustment Schedules C-1 through C-25. The revenue requirement for
21 APS was based upon the ACC jurisdictional adjusted results. This presentation is
22 consistent with the presentation in Attachment RCS-2, that was filed with my Direct
23 Testimony. New schedules have been added to pick up new or revised adjustments that

³ Staff's adjustment for the base cost of fuel and purchased power has been presented on Attachment RCS-2, Schedule C-11, filed with my Direct Testimony and is based on APS's updated forecast that was provided in response to Staff Data Request ("DR") 15.11. This same adjustment is reflected on Attachment RCS-9, Schedule C-11.

1 result from adopting adjustments that were proposed in APS's Rebuttal Testimony. New
2 or revised adjustments are identified on the contents page of Attachment RCS-9.

3
4 **Q. What is shown on Schedules B-1 through B-19 and C-1 through C-25?**

5 A. Schedules B-1 through B-19 provide further support and calculations for the rate base
6 adjustments Staff is recommending. Schedules C-1 through C-25 provide further support
7 and calculations for the net operating income adjustments Staff is recommending.

8
9 *Staff's FVROR Presentation*

10 **Q. What information on the FVROR is Staff presenting to the Commission in this**
11 **proceeding?**

12 A. Similar to Staff's Direct Testimony presentation, Staff's Surrebuttal also presents the
13 Commission with two alternatives for the FVROR to be applied to APS's adjusted FVRB.
14 As shown in Attachment RCS-9, Schedule D, Staff alternative 1 applies a zero cost rate to
15 the FVRB increment and produces a FVROR of 5.06 percent, consistent with the financial
16 principles discussed by Staff witness Parcell. Staff is recommending the alternative
17 methodology under alternative 2, and use of a return of 0.30 percent applied to the FVRB
18 increment. This produces a FVROR of 5.14 percent. The 0.30 percent is developed by
19 Staff witness Mr. Parcell and represents a point within a range from zero to a "real" risk-
20 free rate of return *i.e.* a risk-free rate of return less inflation. This methodology is consistent
21 with the Arizona Fair Value Rate Base Standard. The Direct and Surrebuttal Testimony of
22 Staff witness Mr. Parcell addresses these alternative methods of deriving a FVROR.

23
24 **RATE BASE**

25 **Q. Have you prepared a schedule that summarizes Staff's updated proposed**
26 **adjustments to rate base?**

A. Yes. As noted above, the adjusted rate base is shown on Attachment RCS-9, Schedule B and the adjustments to APS's proposed rate base are shown on Schedule B.1. Attachment RCS-9 contains a separate Schedule B.1 for adjustments to OCRB and to RCND rate base. A comparison of the Company's proposed rate base and Staff's recommended rate base on an OCRB, RCND and FVRB basis are presented below:

Summary of Rate Base \$000's	APS Original App. Schedule B-1 (A)	Staff Surrebuttal Schedule B (B)	Difference (C) = B-A	APS Rebuttal Schedule B-1 (D)	Remaining Rate Base Differences (E) = B-D
Original Cost Rate Base	\$ 8,872,984	\$ 8,899,362	\$ 26,378	\$ 8,896,268	\$ 3,094
RCND Rate Base	\$ 15,747,542	\$ 15,737,589	\$ (9,953)	\$ 15,734,140	\$ 3,449
Fair Value Rate Base	\$ 12,310,263	\$ 12,318,476	\$ 8,213	\$ 12,315,204	\$ 3,272

PTYP

Q. How is inclusion of PTYP in rate base being reflected in the current APS rate case?

A. In the current APS rate case, the test year is the 12 months ending June 30, 2019. Both APS and Staff have reflected actual PTYP in rate base through June 30, 2020, 12 months after the end of the test year, and have also extended accumulated depreciation through that same date. Staff has used actual amounts, which were provided by APS in its supplemental response to Staff DR 15.3 and has reflected certain updates noted in APS's rebuttal.

Q. What PTYP additions is APS requesting?

A. In its rebuttal filing, APS has requested PTYP additions for plant placed into service by June 30, 2020, or 12 months beyond the historic test year in this case. APS's proposed rate base as updated in APS's rebuttal includes PTYP in the following categories for projected plant additions that APS placed into service between June 30, 2019 and June 30, 2020:

- \$216.9 million for fossil generation per Attachment EAB-01RB from APS witness Ms. Blankenship's Rebuttal Testimony;

- \$67.7 million for nuclear generation per Attachment EAB-01RB from APS witness Ms. Blankenship's Rebuttal Testimony;
- \$418 million for distribution and Information Technology ("IT") facilities generation per Attachment EAB-01RB from APS witness Ms. Blankenship's Rebuttal Testimony;
- \$14.2 million for technology innovation per Attachment EAB-01RB from APS witness Ms. Blankenship's Rebuttal Testimony;
- \$17 million for renewable generation per Attachment EAB-01RB from APS witness Ms. Blankenship's Direct Testimony.

Q. What is Staff's position on the inclusion of PTYP in rate base for APS?

A. Staff proposes to include in rate base actual plant that was placed into service by June 30, 2020, as PTYP. APS's supplemental response to Staff DR 15.3 provided a listing of plant that APS has placed into service by June 30, 2020. This date was selected by Staff so that the actual spending by APS could be reviewed and verified. Staff's engineers also reviewed the PTYP based on the actual information through June 30, 2020, that was provided by APS in responses to Staff discovery.

Q. How do the amounts of PTYP compare from APS's rebuttal filing and Staff's surrebuttal filing?

A. Staff's adjustments for PTYP on Attachment RCS-9, Schedules B-1 through B-5 and the PTYP amounts from APS's rebuttal filing are both based on actual PTYP in service through June 30, 2020 and are essentially in agreement.

Q. Please explain how APS and Staff have excluded revenue producing or growth-related plant from PTYP.

1 A. Staff's review identified some growth-related PTYP for meters that APS had inadvertently
2 included in PTYP. Staff excluded those growth-related meter plant additions from PTYP
3 in Staff Adjustment B-9 in Attachment RCS-2 that was filed with my Direct Testimony.
4 In its rebuttal, APS agreed that growth-related PTYP for meters should be excluded and
5 identified some additional amounts. On Attachment RCS-9, Schedule B-3, Staff's updated
6 amounts for Distribution PTYP have removed the additional amounts of growth related
7 PTYP for meters that were identified by APS. As a result of reflecting the exclusion of the
8 growth-related meters PTYP on Attachment RCS-9, Schedule B-3, a separate adjustment
9 (which had been shown on Schedule B-9 of Attachment RCS-2 filed with my Direct
10 Testimony) is no longer necessary.

11
12 B-1. PTYP– Fossil Generation

13 **Q. What is Staff's PTYP additions for Fossil Generation and how does that compare**
14 **with the PTYP for Fossil Generation in APS's rebuttal filing?**

15 A. Attachment RCS-9, Schedule B-1 shows actual post-test year fossil plant additions through
16 June 30, 2020 of \$216.918 million on a total Company basis and \$215.877 million on an
17 ACC jurisdictional basis. This results in an adjustment to increase APS's originally filed
18 projection of post-test year fossil plant additions by \$37.075 million on an ACC
19 jurisdictional basis, as shown on Schedule B-1, column H. The adjusted amount of
20 \$216.918 million agrees with the amount shown on APS witness Blankenship's rebuttal
21 Attachment EAB-01RB.

22
23 B-2. PTYP – Nuclear Generation

24 **Q. What is Staff's PTYP additions for Nuclear Generation and how does that compare**
25 **with the PTYP for Nuclear Generation in APS's rebuttal filing?**

1 A. Attachment RCS-9, Schedule B-2 shows actual post-test year nuclear plant additions
2 through June 30, 2020, of \$67.708 million on a total Company basis and \$67.383 million
3 on an ACC jurisdictional basis. This results in an adjustment to decrease APS's originally
4 filed projection of post-test year nuclear plant additions by \$5.591 million on an ACC
5 jurisdictional basis, as shown on Schedule B-2, column H. The adjusted amount of \$67.708
6 million agrees with the amount shown on APS witness Blankenship's rebuttal Attachment
7 EAB-01RB.

8
9 B-3. PTYP – Distribution and IT/Facilities

10 **Q. What is Staff's PTYP additions for Distribution and IT/Facilities and how does that**
11 **compare with the corresponding PTYP amount in APS's rebuttal filing?**

12 A. Attachment RCS-9, Schedule B-3 shows actual post-test year Distribution and IT/Facilities
13 plant additions through June 30, 2020, of \$418.060 million on a total Company basis and
14 \$403.237 million on an ACC jurisdictional basis. This results in an adjustment to decrease
15 APS's originally filed projection of post-test year plant additions by \$51.505 million on an
16 ACC jurisdictional basis, as shown on Schedule B-3, column H. This amount includes the
17 removal of growth-related meters of \$4.3 million, which was originally removed on
18 Schedule B-9 of my Direct Testimony. Therefore, Schedule B-9 is no longer needed, as
19 discussed below. The adjusted amount of \$418.060 million agrees with the amount shown
20 on APS witness Blankenship's rebuttal Attachment EAB-01RB.

21
22 B-4. PTYP – Technology Innovation

23 **Q. What is Staff's PTYP additions for Technology Innovation and how does that**
24 **compare with the corresponding PTYP amount in APS's rebuttal filing?**

25 A. Attachment RCS-9, Schedule B-4 shows actual post-test year Technology Innovation plant
26 additions through June 30, 2020, of \$14.187 million on a total Company basis and \$14.187

1 million on an ACC jurisdictional basis. This results in an adjustment to decrease APS's
2 originally filed projection of post-test year plant additions by \$11.259 million on an ACC
3 jurisdictional basis, as shown on Schedule B-4, column H. The adjusted amount of \$14.187
4 million agrees with the amount shown on APS witness Blankenship's rebuttal Attachment
5 EAB-01RB.
6

7 B-5. PTYP - Renewables Generation

8 **Q. What is Staff's PTYP additions for Renewables Generation and how does that**
9 **compare with the corresponding PTYP amount in APS's rebuttal filing?**

10 A. Attachment RCS-9, Schedule B-5 shows actual post-test year Renewables Generation plant
11 additions through June 30, 2020, of \$17.048 million on a total Company basis and \$17.048
12 million on an ACC jurisdictional basis. This results in an adjustment to decrease APS's
13 originally filed projection of post-test year plant additions by \$7.316 million on an ACC
14 jurisdictional basis, as shown on Schedule B-5, column H. The adjusted amount of \$17.048
15 million agrees with the amount shown on APS witness Blankenship's rebuttal Attachment
16 EAB-01RB.
17

1 B-6. Accumulated Depreciation Related to PTYP

2 **Q. What is Staff's adjustment for Accumulated Depreciation related to PTYP and how**
3 **does that compare with the corresponding amount in APS's rebuttal?**

4 A. Attachment RCS-9, Schedule B-6 reflects the amounts of Accumulated Depreciation that
5 is associated with PTYP through June 30, 2020. Specifically, columns A and B show the
6 Company's originally filed amounts for Accumulated Depreciation that relate to the PTYP
7 for (1) fossil generation, (2) nuclear generation, (3) distribution and IT facilities, and (4)
8 renewables generation.⁴ As discussed above with regard to Schedules B-1 through B-5, I
9 am recommending that APS's PTYP be based on actual amounts through June 30, 2020,
10 which the Company provided in its supplemental response to Staff DR 15.3, as modified
11 in APS's rebuttal. The amount of ACC jurisdictional Accumulated Depreciation that is
12 associated with PTYP through June 30, 2020, of \$520.4 million on Attachment RCS-9,
13 Schedule B-6, compares with the \$520.4 million amount from APS witness Blankenship's
14 rebuttal Attachment EAB-01RB and APS' rebuttal Schedule B-2.

15
16 B-7. ADIT Related to PTYP

17 **Q. Please discuss Staff's adjustment for ADIT related to PTYP and how that compares**
18 **with the corresponding amount in APS's rebuttal filing.**

19 A. As shown on Attachment RCS-9, Schedule B-7, the adjustment of the rate base offset for
20 ADIT reflects using actual amounts for PTYP ADIT through June 30, 2020. This results
21 in increasing jurisdictional ADIT, and decreasing rate base, by \$53.542 million. In
22 addition, this schedule includes an adjustment related to a basis reduction for APS taking
23 the Investment Tax Credit ("ITC") on its renewables as shown on Attachment RCS-9,
24 Schedule B-7, line 7. This adjustment reduces the Company's jurisdictional regulatory
25 assets by \$199,000. The net adjustment to ADIT reduces rate base by \$53.741 million, as

⁴ APS did not reflect Accumulated Depreciation for PTYP related to technology innovation.

1 shown on Attachment RCS-9, Schedule B-7, line 8. This compares with the \$72.273
2 amount from APS witness Blankenship's rebuttal Attachment EAB-01RB and APS'
3 rebuttal Schedule B-2.

4
5 B-8. Four Corners SCR Deferral

6 **Q. Please discuss Staff's updated adjustment for the Four Corners Units 4 and 5 SCR**
7 **Deferral and how that amount compares with APS's rebuttal.**

8 A. The amounts originally proposed by APS for the four components of the Four Corners SCR
9 deferral (i.e., debt return, property taxes, depreciation and O&M expense) were based on
10 projected monthly amounts for the period July 2019 through December 2020. In my Direct
11 Testimony, I used actual monthly amounts through June 30, 2020, and estimated amounts
12 for July through December 2020 to determine the amount of the Four Corners SCR
13 deferral. In APS's Rebuttal Testimony, the Company used actual monthly amounts
14 through September 30, 2020, and estimated amounts for October through December 2020.
15 On Attachment RCS-9, Schedule B-8, I also used this updated information to calculate the
16 adjustment shown on Schedule B-8.

17
18 Specifically using the actual monthly amounts for the Four Corners SCR deferral for the
19 period July 1, 2019, through September 30, 2020, and the Company's projected amounts
20 for the period October through December 2020, results in a rate base addition of \$43.550
21 million on a total Company basis and by \$43.550 million on an ACC jurisdictional basis.
22 This amount is offset by the related ADIT in the amount of \$10.779 million on a total
23 Company basis and \$10.779 million on an ACC jurisdictional basis. The net rate base
24 amount is \$32.771 million on a total Company basis on an ACC jurisdictional basis. As
25 shown on Attachment RCS-9, Schedule B-8, column F, this adjustment reduces APS's

1 originally proposed net ACC jurisdictional rate base by \$0.269 million. With the update,
2 Staff and APS rebuttal amounts for this deferral are in agreement.

3
4 **Q. Is there a corresponding adjustment to amortization expense for the Four Corners**
5 **SCR deferral?**

6 A. Yes. As discussed later in my Testimony, there is a corresponding adjustment to
7 amortization expense for the Four Corners SCR deferral as shown on Attachment RCS-9,
8 Schedule C-13, which has also been updated to use actual amounts through September 30,
9 2020, and APS's estimated amounts for October through December 2020.

10
11 B-9. New Automatic Metering Infrastructure ("AMI") Meters for Customer Growth

12 **Q. Has the cost for AMI meters related to customer growth been removed from PTYP?**

13 A. Yes. In its rebuttal, APS agreed that PTYP additions for AMI meters related to growth
14 should be removed. Also, APS identified an additional amount that should be removed.
15 Previously, in my Direct Testimony, I removed \$4.1 million on a Total Company basis and
16 \$4 million on an ACC Jurisdictional basis for growth-related AMI meters. The Company
17 indicated on page 10 of Elizabeth Blankenship's Rebuttal Testimony that \$4.3 million has
18 been removed related to growth-related AMI meters in their PTYP adjustment. Therefore,
19 the removal of Distribution PTYP for the growth-related AMI meters is now reflected in
20 Attachment RCS-9, Schedule B-3 as part of my PTYP adjustment related to Distribution
21 and IT/Facilities. As a result of reflecting the exclusion of the growth-related meters PTYP
22 on Attachment RCS-9, Schedule B-3, a separate adjustment for removal of that growth-
23 related PTYP (which had been shown on Schedule B-9 of Attachment RCS-2 filed with
24 my Direct Testimony) is no longer necessary.
25

B-10. Prepaid Directors and Officers ("D&O") Liability Insurance

Q. Are you revising the adjustment for sharing of D&O Liability Insurance cost, shown in Attachment RCS-9, Adjustment B-10, as a result of APS's rebuttal?

A. No. Consistent with the reasoning presented in my Direct Testimony, the adjustment shown on Attachment RCS-9, Schedule B-10 removes one-half of the D&O Liability Insurance expense and reduces the jurisdictional test year allowance for working capital by \$144,509 on an ACC jurisdictional basis. The removal of one-half of this expense reflects an equal (i.e., 50/50) sharing of the cost for this insurance between shareholders and ratepayers.

B-11. Costs for the Damaged and Retired McMicken Battery Energy Storage Facility ("BESF")

Q. Have you updated Staff's adjustment for removal of costs associated with the McMicken BESF?

A. Yes. As shown on Attachment RCS-9, Schedule B-11, I have updated the adjustment to remove costs of the McMicken BESF that experienced a fire on April 19, 2019, and is no longer in service. The update reflects refined amounts identified in APS's rebuttal. APS rebuttal witness Elizabeth Blankenship at page 4 agrees that the McMicken costs should be removed.

B-12. Working Capital

Q. Have you updated Staff's adjustment for cash working capital?

A. Yes. I have updated Staff's adjustment to Cash Working Capital to reflect the impact of Staff's updated adjustments to cash operating expenses. As shown on Attachment RCS-9, Schedule B-12, page 1, APS's original amount of CWC is increased by approximately \$4.957 million on an ACC jurisdictional basis.

1 **Q. Have you reflected other rate base adjustments related to revised or new adjustments**
2 **that APS presented in its rebuttal?**

3 A. Yes. Attachment RCS-9, Schedules B-13 through B-19 reflect other rate base adjustments
4 related to revised or new adjustments that APS presented in its rebuttal. I will briefly
5 discuss each of those adjustments below.
6

7 B-13. West Phoenix Disallowance

8 **Q. Please explain the adjustment shown on Attachment RCS-9, Schedule B-13.**

9 A. In its rebuttal filing, APS updated its pro forma adjustment for the West Phoenix
10 Disallowance. The adjustment shown on Attachment RCS-9, Schedule B-13, reflects the
11 difference between APS's original and rebuttal adjustments for this as a Staff surrebuttal
12 adjustment.
13

14 B-14. Property Tax Deferral

15 **Q. Please explain the adjustment shown on Attachment RCS-9, Schedule B-14.**

16 A. In its rebuttal filing, APS updated its pro forma adjustment for the Property Tax Deferral.
17 The adjustment shown on Attachment RCS-9, Schedule B-14, reflects the difference
18 between APS's original and rebuttal adjustments for this as a Staff surrebuttal adjustment.
19

20 B-15. Ocotillo Deferral

21 **Q. Please explain the adjustment shown on Attachment RCS-9, Schedule B-15.**

22 A. In its rebuttal filing, APS updated its pro forma adjustment for the Ocotillo Deferral. The
23 adjustment shown on Attachment RCS-9, Schedule B-15, reflects the difference between
24 APS's original and rebuttal adjustments for this as a Staff surrebuttal adjustment.
25

1 B-16. Excess Deferred Taxes

2 **Q. Please explain the adjustment shown on Attachment RCS-9, Schedule B-16.**

3 A. In its rebuttal filing, APS updated its pro forma adjustment for Excess Deferred Taxes
4 associated with TEAM Phase III between the test year and estimated TEAM Phase III
5 amortization through December 31, 2020, and as projected by APS through 2021. The
6 adjustment shown on Attachment RCS-9, Schedule B-16, reflects the difference between
7 APS's original and rebuttal adjustments for this item as a Staff surrebuttal adjustment.
8 Staff is pursuing the analysis of APS's TEAM Phase III amounts and there may be a need
9 for further adjustment upon completion of such analysis. As noted in APS's responses to
10 Staff data requests 31.1 and 31.2⁵, particularly in APS's response to Staff DR 31.2(e), if
11 new base rates for APS go into effect prior to December 31, 2021, this rate base adjustment
12 and the one discussed below related to the TEAM balancing account (in Staff Adjustment
13 B-17) can be updated to reflect only the applicable base rate impacts for protected excess
14 ADIT amortization and refunds, respectively, which occur prior to new base rates for APS
15 going into effect. APS has indicated that it will monitor case progress and may provide
16 updates if circumstances warrant.

17
18 B-17. TEAM Balancing Account

19 **Q. Please explain the adjustment shown on Attachment RCS-9, Schedule B-17.**

20 A. In its rebuttal filing, APS added a pro forma adjustment to rate base for the TEAM
21 Balancing Accounts as of September 30, 2020. The adjustment shown on Attachment
22 RCS-9, Schedule B-17, reflects that APS rebuttal adjustment as a Staff surrebuttal
23 adjustment. Staff is pursuing the analysis of APS's TEAM Phase III amounts and there
24 may be a need for further adjustment upon completion of such analysis. As noted above,
25 this rate base adjustment and the one discussed above related to Staff Adjustment B-16 can

⁵ Copies of these APS responses are included in Attachment RCS-10, filed with my Surrebuttal Testimony.

1 potentially be updated, if needed, to reflect only the applicable base rate impacts for
2 protected excess ADIT amortization and refunds, respectively, which occur prior to new
3 base rates for APS going into effect.
4

5 B-18. APS Lease Reclassification

6 **Q. Please explain the adjustment shown on Attachment RCS-9, Schedule B-18.**

7 A. In comparing the amounts of rate base for Operating Lease Liabilities (Line 13 of APS's
8 Rebuttal Schedule B-2) and Operating Lease Right-of-Use Assets (Line 21 of APS's
9 Rebuttal Schedule B-2) with the corresponding amounts for those items in APS's originally
10 filed Schedule B-2, it was revealed that APS shifted \$19.722 million between those two
11 rate base line items (on an ACC jurisdictional basis) in updating from its original filing to
12 its rebuttal schedules. This adjustment merely shifts that \$19.722 million between those
13 two rate base line items, and does not increase or decrease jurisdictional basis. Staff has
14 reflected this adjustment accordingly on Attachment RCS-9, Schedule B-18, to aid
15 comparisons of APS rebuttal and Staff surrebuttal amounts.
16

17 B-19. APS RCND Differences

18 **Q. Please explain the adjustment shown on Attachment RCS-9, Schedule B-19.**

19 A. In reflecting impacts of Staff's rate base adjustments, on Attachment RCS-9, Schedule B.1j
20 and Schedule B.1j RCND, I have generally used the same adjustment amounts for the
21 impact on Original Cost and RCND rate base. Because some of the adjustments have a
22 different impact on RCND rate base, the differential between the OCRB and RCND rate
23 base impacts for those items (Gross Utility Plant in Service, Accumulated Depreciation,
24 Deferred Income Taxes and Regulatory Liabilities) is quantified on Attachment RCS-9,
25 Schedule B-19. The adjustment shown there is made to RCND rate base only to

1 appropriately reflect the different amounts that are used for the RCND adjustments for the
2 above-noted rate base items. This adjustment does not affect original cost rate base.

4 **ADJUSTMENTS TO OPERATING INCOME**

5 *Significant New Adjustments in APS's Rebuttal*

6 **Q. Are there certain significant new Company proposed adjustments that are new in**
7 **APS's Rebuttal that you would like to address?**

8 A. Yes. Referring to the Table 1 on APS witness Snook's Rebuttal Testimony, page 12, APS's
9 rebuttal filing has included a number of significant new adjustments.

10
11 APS proposes to reduce the revenue requirement by approximately \$20 million for two
12 new depreciation expense adjustments. In its rebuttal, APS proposes to amortize the
13 depreciation reserve excess for Palo Verde nuclear plant over six years, versus the nine-
14 year amortization period that was reflected for this in APS's original Application. APS
15 also proposes to use a 40-year service life for AZ Sun solar generating facilities, versus the
16 30-year service life for such facilities that was reflected in APS's original Application.
17 Staff agrees with these new APS adjustments to depreciation expense. I have reflected
18 these adjustments on Attachment RCS-9, Schedule C-14A and C-14B, respectively.

19
20 APS has adopted an adjustment proposed by AECC to reflect a "normal" level of pension
21 and OPEB expense by averaging 2019 and 2020 amounts that reduces the revenue
22 requirement by approximately \$12.853 million. Staff agrees with this adjustment and I
23 have reflected it on Attachment RCS-9, Schedule C-17.

24

1 APS has indicated that it recovers approximately \$15 million per year in AG-X revenue
2 related to the test year Power Supply Adjustor. Staff agrees with this adjustment and I have
3 reflected it on Attachment RCS-9, Schedule C-18.

4
5 APS has identified an error where approximately \$17.6 million of Transmission Expense
6 in March 2019 was omitted in APS's original Application. Staff has issued discovery to
7 APS to better understand the details of this APS-identified error correction. Subject to
8 obtaining adequate supporting detail, I have reflected an adjustment for this error correction
9 on Attachment RCS-9, Schedule C-19.

10
11 APS's rebuttal has identified approximately \$13.35 million for proposed recovery for its
12 CCT commitment. APS proposes to recover this through a new adjustment mechanism –
13 the Advanced Energy Mechanism ("AEM"), the framework of which is presented by APS
14 on a two-page "Term Sheet" in Attachment LRS-02RB to Mr. Snook's Rebuttal
15 Testimony. Staff's position is that APS's proposed new AEM adjustor has not been
16 adequately developed, is not warranted and should therefore not be adopted. Concerning
17 the CCT commitment amounts, Staff has sought in discovery additional information
18 concerning how APS determined the amounts that were identified in APS's rebuttal, and
19 how APS determined the proportion of sharing of the CCT amounts between shareholders
20 and customers. The CCT commitment amounts appear to be the only specific dollar
21 amounts identified in APS's rebuttal at this time for APS's new proposed AEM adjustor.
22 If the Commission approves CCT commitment cost recovery, a specific limited CCT
23 adjustor related only to those amounts could be helpful in tracking the recovery of such
24 costs and assuring that once the amounts are recovered, the CCT adjustor terminates and
25 the cost recovery ceases. The CCT amounts and their allocation between shareholders and
26 ratepayers and whether that is reasonable has not been adequately developed. Additionally,

1 the coal community transition issue affects other Arizona utilities with ownership interests
2 in coal-fueled generating facilities. This issue is not confined to APS. For purposes of the
3 current APS rate case, Staff recommends that APS develop a specific funding mechanism,
4 the CCTC adjustor, along with a related Plan of Administration, but that no funding be
5 approved at this time. On Attachment RCS-9, Schedule A, lines 8 and 17, the cost recovery
6 for the Company's CCT commitment is being reflected as occurring in a specific limited
7 CCTC adjustor, rather than as part of new base rates for APS. Because Staff believes that
8 additional information is needed, no initial funding amount for the CCTC adjustor is
9 reflected at this time. Staff therefore believes there could be merit in establishing a generic
10 proceeding to address CCT issues, along with potential securitization of CCT and other
11 costs.

12
13 C-1. Miscellaneous Out of Period Costs

14 **Q. Does APS's rebuttal agree that the Bain consulting costs recorded in the test year**
15 **should be removed?**

16 A. Yes. Schedule C-1 filed in Attachment RCS-2 with my Direct Testimony reflected an
17 adjustment to remove certain miscellaneous out of period expenses from test year cost of
18 service, based on APS's responses to discovery. Specifically, as shown on Schedule C-1,
19 the Bain consulting costs were removed from cost of service, which reduces operating
20 expenses by \$695,000 on a total Company basis and by \$636,000 on an ACC jurisdictional
21 basis. APS's rebuttal agrees that the \$695,000 for Bain Costs should be removed.
22

C-2. Injuries and Damages

Q. Have you revised Staff Adjustment C-2 for injuries and damages as a result of APS's rebuttal?

A. No. This adjustment reflects the Company's injuries and damages expense included in cost of service based on a four-year historical average of 2016 through 2019 for such costs. As shown on Attachment RCS-9, Schedule C-2, this adjustment increases operating expenses by \$204,000 on a total Company basis and by \$187,000 on an ACC jurisdictional basis, and is unchanged from my Direct Testimony.

C-3. Utility Air Regulatory Group ("UARG") and Utility Solid Waste Activities Group ("USWAG") Membership Dues

Q. Has APS agreed that the expense for UARG and USWAG membership dues should be removed?

A. Yes. APS has agreed that as of January 1, 2020, it was no longer a member of the (1) UARG, or (2) USWAG and therefore the test year amounts of such dues should be removed. Attachment RCS-3, Schedule C-3, removes the UARG and USWAG membership dues noted above which total \$233,159 on a total Company basis and \$213,268 on an ACC jurisdictional basis. This adjustment is unchanged from my Direct Testimony.

C-4. Depreciation Expense – PTYP (At Current Depreciation Rates)

Q. Please explain how you revised Staff Adjustment C-4 for Depreciation Expense for PTYP at current depreciation rates.

A. The amounts of PTYP in column D uses information that was provided by APS on Attachment "ExcelAPS19RC02032" from its second supplemental response to Staff DR 15.3 as updated for amounts reflected in APS's rebuttal. As shown on Attachment RCS-

1 9. Schedule C-4, column G, this adjustment reduces depreciation expense by \$5.584
2 million on a total Company basis and by \$5.002 million on an ACC jurisdictional basis
3 based on differences between Staff's adjusted and APS's originally proposed amounts of
4 PTYP.

5
6 C-5. Property Tax Expense PTYP

7 **Q. Have you updated Staff Adjustment C-5 in response to APS's rebuttal?**

8 A. Yes. As shown on Attachment RCS-9, Schedule C-5, this adjustment reduces property tax
9 expense by \$1.124 million on a total Company basis and by \$934,000 on an ACC
10 jurisdictional basis to reflect more current information on the assessment and effective
11 property tax rate.

12
13 C-6. AMI Meters Depreciation Expense

14 **Q. Have you revised Staff Adjustment C-6?**

15 A. Yes. This adjustment reflects the removal of AMI meters related to customer growth from
16 PTYP additions. Similar to the discussion of Staff rate base adjustment B-9, above, APS
17 has agreed that PTYP related to customer growth should be removed. A separate
18 adjustment for the related depreciation expense on the AMI meters for customer growth is
19 no longer necessary.

20
21 C-7. D&O Liability Insurance

22 **Q. Have you revised Staff Adjustment C-7 in response to APS's rebuttal?**

23 A. No. The adjustment is shown on Attachment RCS-9, Schedule C-7 removes one-half of
24 the D&O Liability Insurance expense and reduces jurisdictional test year O&M expense
25 by \$360,430 on an ACC jurisdictional basis. The removal of one-half of this expense
26 reflects an equal (i.e., 50/50) sharing of the cost for this insurance between shareholders

1 and ratepayers. This adjustment amount is the same as was indicated in my Direct
2 Testimony.

3
4 C-8. Incentive Compensation Expense

5 **Q. What has APS stated in rebuttal concerning incentive compensation expense?**

6 A. APS witness Lockwood at pages 12-13 of her Rebuttal Testimony claims that the
7 Company's cash incentive compensation program should not be subject to a disallowance
8 based on the portion that is tied to the Company's earnings. She claims that the Staff,
9 RUCO and AECC position, which had recommended a partial disallowance of annual
10 incentive compensation, is based on a flawed position, and that a financial healthy utility
11 is not contrary to the interests of customers. APS witness Blankenship's Rebuttal
12 Testimony at pages 18-19 presents a similar argument and concludes that the Staff, RUCO
13 and AECC adjustments for incentive compensation would disallow prudent costs that
14 ultimately benefit customers.

15
16 **Q. Have you revised your adjustment on Schedule C-8 in response to APS's rebuttal?**

17 A. No. Staff's adjustment removes 50 percent of APS's normalized level of annual incentive
18 compensation expense in order to reflect the sharing of that expense between shareholders
19 and ratepayers. The removal of 50 percent of the incentive compensation expense, in
20 essence, provides an equal sharing of such cost, and therefore, provides an appropriate
21 balance between the benefits attained by both shareholders and ratepayers. Both
22 shareholders and ratepayers stand to benefit from the achievement of performance goals,
23 including earnings. Moreover, there is no assurance that the award levels included in the
24 Company's proposed or Staff's normalized expense (before sharing) will be repeated in
25 future years. As shown on Attachment RCS-9, Schedule C-8, the adjusted test year
26 expense for incentive compensation that was proposed by APS is reduced by \$20.381
27 million on a total Company basis and by \$18.709 million on an ACC jurisdictional basis.

1 This adjustment amount is the same as the amount reflected in my Direct Testimony. I
2 note that similar adjustments have been made by Staff in previous APS rate cases for
3 similar reasons.
4

5 **Q. Was an adjustment for equal sharing of APS's cash-based incentive compensation**
6 **expense made in prior APS rate cases?**

7 A. In APS's last litigated base rate case, Docket No. E-01345A-05-0816, only stock-based
8 compensation was removed. However, in APS's last three base rate cases, Docket Nos. E-
9 01345A-08-0172, E-01345A-11-0224 and E-01345A-16-0036, Staff made an adjustment
10 to share on a 50/50 basis between shareholders and ratepayers APS's cash-based incentive
11 compensation expense. That Staff adjustment was incorporated into the development of
12 the allowed revenue requirement for APS in Docket No. E-01345A-08-0172, while Docket
13 Nos. E-0145A-11-0024 and E-01345A-16-0036 resulted in Settlement Agreements among
14 the parties.
15

16 C-9. Executive Compensation – Housing, Retention Bonuses, Financial Planning and Physicals

17 **Q. What does APS state in rebuttal concerning executive compensation.**

18 A. At pages 10-11 of his Rebuttal Testimony, APS witness Guldner states that the Company
19 must offer compensation and benefits that are competitive to attract highly qualified and
20 experienced executives. He states that APS relies upon an independent compensation
21 consulting firm to annually review its executive compensation. He notes that APS has
22 already excluded certain elements of executive compensation, including SERP and stock-
23 based compensation. He states that portions of APS's executive compensation are
24 allocated to and are paid by the various owners of the participating generating stations that
25 APS operates. He concludes that APS's compensation policy is prudent and that APS's
26 executive team compensation is reasonable and appropriate.
27

1 **Q. Have you revised Staff's adjustment on Schedule C-9 as a result of APS's Rebuttal**
2 **Testimony?**

3 A. No. This adjustment removes certain categories of executive compensation from APS's
4 test year operating expenses. The amounts being removed is for perquisites including
5 Company paid executive physical and financial planning, housing, and retention bonuses.
6 The amounts of executive compensation being excluded on Attachment RCS-9, Schedule
7 C-9 reflect removal of the amounts allocated to APS and included in operating expenses
8 by the Company for following the following categories of executive perquisites: (1)
9 Housing Allowance, (2) Retention, and (3) Financial Planning and Physicals. The
10 Company's requested jurisdictional revenue requirement includes \$56,136, \$148,744, and
11 \$37,568 for corporate and executive officers housing allowance, retention bonuses, and
12 financial planning and physicals, respectively. As shown on Attachment RCS-9, Schedule
13 C-9, I have removed from APS's test year O&M expense the ACC jurisdictional amounts
14 shown above for corporate and executive officers housing allowances, retention bonuses,
15 and financial planning and physicals. Similar to the reasons for not including stock-based
16 compensation and SERP expense, which the Company has voluntarily removed from its
17 requested jurisdictional revenue requirement, ratepayers should not be responsible for the
18 costs associated with executive perquisites such as housing allowances, retention bonuses,
19 and Company-paid financial planning and physicals. These executive perquisites do not
20 provide any benefit to ratepayers nor are they necessary for the provision of safe and
21 reliable electrical service to APS's customers.

C-10. Interest Synchronization

Q. Have you updated the interest synchronization adjustment?

A. Yes. The interest synchronization adjustment applies the weighted cost of debt to the adjusted rate base to derive a pro forma interest expense deduction that is used in the calculation of test year income expense. After adjustments, Staff's proposed rate base differs from that of the Company. This results in an adjustment to the amount of synchronized interest included in the tax calculation. The updated calculation of the interest synchronization adjustment is shown on Attachment RCS-9, Schedule C-10. This adjustment decreases income tax expense by the amount shown on Schedule C-10, line 7, and increases the Company's achieved operating income by a similar amount.

C-11. Base Cost of Fuel and Purchased Power

Q. Has APS accepted Staff's adjustment the base cost of fuel and purchased power to use a more updated forecast?

A. As discussed on page 10 of his Rebuttal Testimony, APS witness Snook indicates that APS accepts Staff's adjustment to update the current base fuel rate of 3.0167 cents per kWh that was authorized by the Commission in Decision No. 76295 to \$3.1451, which was based on an updated fuel forecast that APS provided in discovery.

C-12. Interest on Customer Deposits

Q. Did APS include with its Rebuttal Testimony an adjustment to reflect the current customer deposit interest rate that became effective on January 3, 2020?

A. Yes. APS witness Blankenship's Rebuttal Testimony addresses this at page 8. She indicates that APS has made an update to its pro forma adjustments on SFR Schedule C-2, Attachment EAB-26RB, in column 32 to reflect this.

1 **Q. Has Staff already reflected that adjustment?**

2 A. Yes. On Schedule C-12 of Attachment RCS-2 that was filed with my Direct Testimony,
3 Staff had made an adjustment to reduce the level of interest on customer deposits included
4 in cost of service to reflect the customer deposit interest rate of 1.56 percent that became
5 applicable on January 3, 2020. The 2020 customer deposit rate is 1.56 percent, which APS
6 conceded should be the rate used to determine interest on customer deposits included in
7 cost of service.⁶ Applying the 2020 customer deposit interest rate of 1.56 percent to the
8 ACC jurisdictional amount of customer deposits, which, as shown on Attachment RCS-9,
9 Schedule C-12, reflects annual customer deposit interest of \$1.270 million and reduces the
10 operating expenses in APS's original Application by \$847,000 on an ACC jurisdictional
11 basis. This adjustment remains the same as presented with my Direct Testimony.
12

13 **Q. With APS's rebuttal adjustment are APS and Staff now using the same annual**
14 **amount for customer deposit interest?**

15 A. Yes. With APS's rebuttal adjustment, APS and Staff are now using the same annual
16 amount of \$1.270 million for customer deposit interest.
17

18 C-13. Four Corners SCR Deferral Amortization

19 **Q. Have you updated Staff's adjustment for amortization expense related to the Four**
20 **Corners SCR deferral in the current proceeding?**

21 A. Yes. My Direct Testimony on this had used actual monthly amounts for the debt return,
22 property taxes, depreciation expense, and O&M expense components of the Four Corners
23 SCR deferral for the period of April 2018 through June 2020, and projected amounts for
24 July through December 2020.
25

⁶ See the response to Staff DR 6.1(c).

As shown on Attachment RCS-9, Schedule C-13, this adjustment has been updated to use actual monthly amounts through September 30, 2020, and the Company's projected amounts for the period October through December 2020. As shown on Attachment RCS-9, Schedule C-13, column F, this updated adjustment reduces APS's originally proposed amortization expense by \$73,000 on an ACC jurisdictional basis.

C-14. Depreciation Expense – New Depreciation Rates Using SFAS 143 Method for Cost of Removal

Q. What has APS stated in rebuttal concerning the use of the SFAS 143 method for reflecting cost of removal in the development of APS's new depreciation rates?

A. APS witness White's Rebuttal Testimony in Section V argues against this. He claims that using the SFAS 143 method would inequitably shift the timing of depreciation expense by reducing current accruals. At page 9, he cites a Michigan decision where that commission found the traditional straight-line method to be preferable to the SFAS 143 method. At page 11, he presents an illustration showing for the Four Corners generating station how applying the SFAS 143 method would reduce depreciation in early years and have increases in later years. His Four Corners illustration uses a projection through 2038, even though APS has announced that it will be retiring the unit by 2031. At page 12, he claims that using the SFAS 143 method recommended by Staff appears to serve no other useful purpose than to reduce current depreciation rates.

Q. Please respond to Dr. White's claim that using the SFAS 143 method would inequitably shift the timing of depreciation expense by reducing current accruals.

A. In the current case using that SFAS 143 method would shift the timing of depreciation expense by reducing current accruals for cost of removal/negative net salvage to eliminate or modify the impact of estimated future inflation. However, I disagree with Dr. White's

1 attempt to prejudge the issue by claiming that that is somehow “inequitable.” Indeed,
2 APS’s own depreciation rates proposal in its originally filed Application, and which has
3 been continued in APS’s rebuttal presentation, includes similar shifting. APS has proposed
4 to continue to use a period for depreciating Four Corners that is well beyond APS’s
5 announced retirement date for that plant; however, that is not characterized by APS as
6 inequitable. Additionally, in its rebuttal, APS makes two additional adjustments to its
7 originally proposed depreciation rates, both of which have the result of lowering current
8 depreciation expense and shifting the timing of cost recovery. Thus, the equity or lack
9 thereof of such proposals is in the eye of the beholder. Using the SFAS 143 method for
10 cost of removal/negative net salvage is equitable and reasonable. Moreover, in the current
11 APS rate case, the use of that method could well have additional benefits to both APS and
12 customers, by allowing higher levels of costs related to Four Corners to be subject to
13 securitization.

14
15 **Q. How could using the SFAS 143 method facilitate higher levels of costs related to Four**
16 **Corners to being subject to securitization?**

17 A. APS witness Lockwood’s Rebuttal Testimony at pages 13-19 discuss the concept of
18 securitization in conjunction with her discussion of Four Corners costs. At page 14, Ms.
19 Lockwood states that APS continues to depreciate the Four Corners asset to 2038, despite
20 its planned closing by 2031, to avoid upward pressure on rates. On pages 17-18, she
21 indicates that, with respect to the unrecovered book value of assets no longer in service,
22 securitization can potentially lower customer costs, by financing at a debt cost which is
23 likely to be less than the utility’s regulated cost of capital. Thus, similar to APS’s proposed
24 continued use of a depreciable life through 2038 for Four Corners, the use of the SFAS 143
25 method for cost of removal/negative net salvage, could likewise facilitate having a larger
26 amount of remaining cost for negative net salvage/cost of removal by the Company’s

1 announced 2031 retirement date, which could potentially be subject to cost savings via
2 securitization. Applying the SFAS 143 method could thus result not only in current cost
3 savings and mitigation of APS's revenue requirement in the current rate case, but also could
4 facilitate longer term savings in the future if APS is able to use securitization to reduce
5 carrying costs on retired fossil generating units, such as but not necessarily limited to Four
6 Corners.

7
8 **Q. Is Staff taking a position on securitization in the current case?**

9 A. No. APS has not made a specific securitization proposal to address. Staff will continue to
10 monitor developments, including enabling legislation. The point being made with respect
11 to APS's new depreciation rates in the current case is simply that holding down
12 depreciation for fossil generating stations in the current case via the Application of the
13 SFAS 143 method would not only produce current savings and revenue requirement
14 mitigation, but could also facilitate additional future cost savings if APS is able to use
15 securitization for retired fossil generating plant at some point in the future.

16
17 **Q. Please respond to Dr. White's citation of a Michigan decision on page 10 of his**
18 **rebuttal.**

19 A. In the decision cited by Dr. White, the Michigan Commission determined that the
20 simplicity of the straight-line method outweighed the complexity of an alternative method
21 such as the SFAS 143 approach. Apparently, that was consistent with the Michigan PSC
22 Staff position in that proceeding. In contrast, other jurisdictions, notably, Maryland and
23 the District of Columbia have found the SFAS 143 method to be an improvement to the
24 traditional method for the recognition of cost of removal/negative net salvage and have
25 therefore required the utilities they regulate to utilize the SFAS 143 method, as cited in my
26 Direct Testimony. Additionally, the Staff recommendation in the current APS case is to
27 adopt the SFAS 143 method.

1 **Q. Is using the SFAS 143 method for cost of removal/negative net salvage equitable and**
2 **reasonable?**

3 A. Yes. Using the SFAS 143 method is both equitable and reasonable for the reasons
4 explained in my Direct Testimony.
5

6 **Q. Is the fact that using the SFAS 143 method would reduce depreciation expense for**
7 **new rates below the level that APS originally proposed a valid reason for rejecting**
8 **the SFAS 143 method?**

9 A. No. The fact that an improved method for addressing the cost of removal/negative net
10 salvage component of depreciation rates results in reduced expense is not a valid reason
11 for rejecting the SFAS 143 method. Moreover, APS's own presentation includes a number
12 of aspects which appear to have no other purpose than reducing depreciation expense. It
13 has been noted that APS proposes to continue to depreciate the Four Corners generating
14 station through 2038, notwithstanding its announcement that it would be retired by 2031.
15 This continued use of that assumed life by APS serves to hold down the amount of annual
16 depreciation expense. Dr. White does not take exception to that Company decision or
17 criticize it, even though the impact is to hold down APS's depreciation expense in the
18 current rate case. Additionally, in its rebuttal, APS makes two additional adjustments to
19 its originally proposed depreciation rates, both of which have the result of lowering current
20 depreciation expense and shifting the timing of cost recovery.
21

22 **Q. Did Dr. White provide updated workpapers or Excel files with his Rebuttal**
23 **Testimony?**

24 A. No.
25

1 **Q. Are you adjusting the Staff's adjustment for new depreciation rates using the SFAS**
2 **143 method at this time?**

3 A. No. Attachment RCS-9, Schedule C-14 at this time presents the same adjustment for using
4 the SFAS 143 method that was filed with my Direct Testimony. As I have noted in other
5 sections of this Testimony, in its rebuttal filing APS made two new adjustments to its
6 depreciation rate proposals in its rebuttal filing, relating to the amortization period for the
7 Palo Verde depreciation reserve excess and for using a 40 year service life for AZ Sun
8 solar generation; however, Dr. White did not include supporting workpapers or updates to
9 the SFAS 143 part of his depreciation study with APS's rebuttal filing. Staff has asked
10 follow up discovery of APS to obtain such information. If supporting workpapers and
11 Excel files become available for APS witness White updating the SFAS 143 section of his
12 depreciation rate study, consistent with the new adjustments that APS has made to its
13 proposed depreciation rates, I would reserve the right to make conforming updates after
14 review of such workpapers and supporting calculations.

15
16 **Q. Why is the SFAS 143 method preferable to the traditional straight-line approach for**
17 **the cost of removal/negative net salvage component of a utility's depreciation rates?**

18 A. The SFAS 143 method preferable to the traditional straight-line approach for the cost of
19 removal/negative net salvage component of a utility's depreciation rates because it avoids
20 charging current utility customers with multiple years of estimated future inflation. The
21 inclusion of estimated future inflation in the cost of removal (negative net salvage)
22 component of APS's proposed depreciation rates is most obvious with dismantlement costs.
23 APS had dismantlement studies conducted for a number of its generating plants, including
24 fossil-fueled generation and solar generation. APS's calculations of the dismantlement
25 costs to be included in its development of the negative net salvage is shown in APS witness
26 Dr. White's Direct Testimony, specifically in his Attachment REW-2DR, page 87,

1 Statement G. The APS calculations for this have been reproduced on Attachment RCS-9,
2 Schedule C-14.4.

3
4 As shown there, APS is inflating the dismantlement cost amount from each study out
5 through the projected retirement date of each unit. For example, for Four Corners, the
6 dismantlement cost is inflated from 2015 (the year of the study) to 2038 (the year
7 anticipated for plant retirement). This procedure results in charging current ratepayers for
8 estimated future inflation.

9
10 There are alternative ways to compute the cost of removal component of depreciation rates
11 that help avoid charging current ratepayers for estimated future inflation. The SFAS 143
12 method, which is Staff's primary recommendation in this case, and which has been adopted
13 in recent cases in Maryland and the District of Columbia, uses the present value method
14 for the cost of removal component of depreciation rates. That method applies a present
15 value approach similar to the one that is described in SFAS 143 which is part of GAAP for
16 asset retirement obligations. The discounted present value approach for cost of removal
17 has been discussed in additional detail in Section V of my Direct Testimony.

18
19 As it applies to APS's fossil and solar plant for which APS has presented dismantlement
20 studies, two other relatively straight-forward approaches could be utilized to remove the
21 estimated future inflation component from the cost of removal for those plants.

22
23 **Q. Please summarize the adjustment to the APS-proposed amounts of "studied"**
24 **Depreciation and Amortization Expense for using the SFAS 143 method?**

25 A. Staff is proposing to use SFAS 143 Method for the cost of removal/negative net salvage
26 component of APS's new depreciation rates instead of the traditional method that the

1 Company is proposing to use. Staff's adjustment for new depreciation rates, applied to test
2 year plant, is shown on Attachment RCS-9, Schedule C-14 and reduces APS's requested
3 depreciation expense by \$13.546 million on a total Company basis and by \$12.134 million
4 on an ACC jurisdictional basis. If supporting detail becomes forthcoming from APS to
5 incorporate the impacts of APS's new depreciation adjustments in recalculated SFAS 143
6 method results, as noted above, I reserve the right to update this Staff adjustment after
7 reviewing such materials.
8

9 **Q. Have you reflected any adjustments for the use of different useful lives for APS plant**
10 **in your rebuttal?**

11 A. Yes. As discussed below, I have reflected APS's revised proposal to use a forty-year
12 estimated service life for AZ Sun solar generating facilities.
13

14 **Q. At the time of your Direct Testimony, did you recommend adjustments for the use of**
15 **different useful lives for APS's distribution or general plant at that time?**

16 A. No, not at that time.
17

1 **Q. APS witness White's Rebuttal Testimony has a section III wherein he discusses**
2 **certain adjustments proposed by RUCO witness Radigan to use better-fitted**
3 **depreciation lives and curves. Should your Direct Testimony be construed in any**
4 **manner against the merit of RUCO witness Radigan's recommendations?**

5 A. No. Dr. White's Rebuttal Testimony at page 6, at the end of his discussion of RUCO
6 witness Radigan's depreciation recommendations, states that: "It is noteworthy that Staff
7 witness Smith testified that '... depreciation lives and curves proposed by APS in Dr.
8 White's Attachment REW-2 should be adopted for use in this case'" At the time of
9 Staff's direct filing, I did not have access to RUCO witness Radigan's depreciation
10 recommendations and therefore could not have considered them at that time. My Direct
11 Testimony should not be construed in any manner against the merit of RUCO witness
12 Radigan's depreciation rate recommendations.

13
14 **Q. At page 6 of his Rebuttal Testimony, Dr. White states that: "The knowledge and effort**
15 **required to create the spreadsheet is a work product of Foster Associates that was not**
16 **provided to Mr. Radigan to appropriate, modify and use to derive his accrual rates."**
17 **Is this lack of transparency in the depreciation studies prepared for APS by Dr.**
18 **White's firm, Foster Associates, a cause for concern?**

19 A. Yes. The development of depreciation rates for a regulated public utility such as APS
20 should be transparent. Failing to provide spreadsheets with sufficient detail in support of
21 proposed utility depreciation rates and which can be used to analyze and modify the
22 utility's proposed new depreciation rates is not acceptable. The Commission should
23 require full transparency from its regulated utilities in supporting and providing workpaper
24 details for the depreciation rates that the utility is requesting the Commission to approve.
25

1 **Q. Please summarize your recommended adjustment to depreciation expense for new**
2 **depreciation rates.**

3 A. As shown on Attachment RCS-9, Schedule C-14, page 1, the recommendations concerning
4 the treatment for the cost of removal component of depreciation rates reduces APS's
5 requested depreciation expense by approximately \$13.546 million on a total Company
6 basis and \$12.134 million on an ACC jurisdictional basis. As noted above, this adjustment
7 may be updated by Staff if APS provides information that has been requested by Staff in
8 discovery related to updating the SFAS 143 method depreciation rates to reflect the impact
9 of APS's other depreciation rate updates.

10
11 C-14A. Depreciation Rates – Palo Verde Depreciation Reserve Excess Amortization

12 **Q. Please explain Staff Adjustment C-14A.**

13 A. In its rebuttal, APS proposes to amortize the depreciation reserve excess for Palo Verde
14 nuclear plant over six years, versus the nine-year amortization period that was reflected for
15 this in APS's original Application. I have reflected this adjustment on Attachment RCS-
16 9, Schedule C-14A.

17
18 C-14B. Depreciation Rates – AZ Sun Solar Facility Useful Life

19 **Q. Please explain Staff Adjustment C-14B.**

20 A. In its rebuttal, APS now proposes to use a 40-year service life for AZ Sun solar generating
21 facilities, versus the 30-year service life for such facilities that was reflected in APS's
22 original Application. I have reflected this adjustment on Attachment RCS-9, Schedule C-
23 14B.

24

C-15. Depreciation Expense on PTYP at Staff's Recommended Depreciation Rates

Q. Have you updated Staff Adjustment C-15?

A. Yes. This adjustment adjusts depreciation expense on PTYP to reflect the new depreciation rates recommended by Staff. As shown on Attachment RCS-9, Schedule C-15, depreciation expense on PTYP is reduced by \$267,000.

C-16. Expenses Related to Damaged and Retired McMicken BESF

Q. Have you updated Staff Adjustment C-16?

A. Yes. The Staff adjustment shown on Attachment RCS-9, Schedule C-16 removes expenses related to the damaged and retired McMicken BESF. In her Rebuttal Testimony at page 4, APS witness Blankenship indicates that APS agrees that expenses related to the damaged and retired McMicken BESF should be removed, and identified a revised amount of \$659,000 for the O&M expense adjustment. Staff's updated adjustment incorporates the updated O&M expense adjustment identified by APS witness Blankenship.

C-17. Normal Pension and OPEB Expense

Q. Please explain Staff Adjustment C-17.

A. In its rebuttal, APS adopted an adjustment proposed by AECC to reflect a "normal" level of pension and OPEB expense by averaging 2019 and 2020 amounts. Staff agrees with this adjustment and I have reflected it on Attachment RCS-9, Schedule C-17. Employee benefit expense is reduced by \$12.853 million on an ACC jurisdictional basis.

C-18. AG-X Revenue for Test Year Power Supply Adjustor

Q. Please explain Staff Adjustment C-18.

A. In its rebuttal, APS has indicated that it recovers approximately \$15 million per year in AG-X revenue related to the test year Power Supply Adjustor. As explained on page 10 of

1 APS witness Snook's Rebuttal Testimony, as part of the AG-X program, APS retains \$1.25
2 million in margins from wholesale sales per month from the margins that credit the overall
3 APS fuel costs in the PSA. Because APS retains such revenues through the PSA
4 mechanism, the \$15 million annual amount should not be included in the base rate revenue
5 deficiency. Staff agrees with this adjustment and I have reflected it on Attachment RCS-
6 9, Schedule C-18.

7
8 C-19. Transmission Expense Error Correction

9 **Q. Please explain Staff Adjustment C-19.**

10 A. In its rebuttal, APS has identified an error where approximately \$17.6 million of
11 Transmission Expense in March 2019 was omitted in APS's original Application. Mr.
12 Snook's Rebuttal Testimony states at page 13 that Transmission Expense for March 2019
13 was inadvertently omitted from APS's model resulting in an understatement of its revenue
14 requirement by approximately \$18 million. Staff has issued discovery to APS to better
15 understand the details of this APS-identified error correction. Subject to obtaining
16 adequate supporting detail, I have reflected an adjustment for this error correction on
17 Attachment RCS-9, Schedule C-19.

18
19 C-20. TEAM Balancing Account

20 **Q. Have you reflected other net operating income adjustments for items that were**
21 **revised in APS's rebuttal?**

22 A. Yes. As described below, I have reflected a number of adjustments in Staff's surrebuttal
23 presentation to reflect costs that were revised in APS's rebuttal.
24

1 **Q. Please explain the adjustment shown on Attachment RCS-9, Schedule C-20.**

2 A. In its rebuttal filing, APS added a new pro forma adjustment No. 53 to reflect Amortization
3 of the TEAM balancing account from the rate effective date over ten years. The adjustment
4 shown on Attachment RCS-9, Schedule C-20, reflects the impact of this new APS
5 adjustment. Attachment RCS-10 presents APS's responses to Staff DR 31.1 and 31.2
6 which address the rate base adjustment that APS included in its rebuttal related to the
7 TEAM balancing account. As noted above, Staff is continuing to investigate the APS
8 TEAM Balancing Account and the related amortization.

9
10 C-21. Crisis Bill

11 **Q. Please explain the adjustment shown on Attachment RCS-9, Schedule C-21.**

12 A. In its rebuttal filing, APS updated its pro forma adjustment for Crisis Bill to correct an
13 inadvertent error where crisis bill assistance was shown as revenue but should have been
14 an expense. The adjustment shown on Attachment RCS-9, Schedule C-21, reflects the
15 difference between APS's original and rebuttal adjustments for this as a Staff surrebuttal
16 adjustment. It should be noted that this correction changed the presentation but did not
17 change the net operating income impact.

18
19 C-22. Ocotillo Modernization Project Deferral Amortization

20 **Q. Please explain the adjustment shown on Attachment RCS-9, Schedule C-22.**

21 A. In its rebuttal filing, APS updated its pro forma adjustment for the Ocotillo Modernization
22 Project Deferral Amortization. The adjustment shown on Attachment RCS-9, Schedule C-
23 22, reflects the difference between APS's original and rebuttal adjustments for this as a
24 Staff surrebuttal adjustment.

25

C-23. West Phoenix Disallowance

Q. Please explain the adjustment shown on Attachment RCS-9, Schedule C-23.

A. In its rebuttal filing, APS updated its pro forma adjustment for the West Phoenix Disallowance. The adjustment shown on Attachment RCS-9, Schedule C-23, reflects the difference between APS's original and rebuttal adjustments for this as a Staff surrebuttal adjustment.

C-24. Annualize Property Taxes

Q. Please explain the adjustment shown on Attachment RCS-9, Schedule C-24.

A. In its rebuttal filing, APS updated its pro forma adjustment to Annualize Property Taxes. The adjustment shown on Attachment RCS-9, Schedule C-24, reflects the difference between APS's original and rebuttal adjustments for this as a Staff surrebuttal adjustment.

C-25. Amortize Property Tax Deferral

Q. Please explain the adjustment shown on Attachment RCS-9, Schedule C-25.

A. In its rebuttal filing, APS updated its pro forma adjustment to Amortize the Property Tax Deferral. The adjustment shown on Attachment RCS-9, Schedule C-25, reflects the difference between APS's original and rebuttal adjustments for this as a Staff surrebuttal adjustment.

APS'S REQUESTED ACCOUNTING DEFERRALS

Q. What is an accounting deferral?

A. An accounting deferral is a Commission authorized ratemaking mechanism that provides APS the ability to defer costs that would otherwise be expensed during the current accounting period under GAAP. An accounting deferral can address the timing mismatch between cost incurrence and when a utility is allowed to recover the asset in rates. It can also provide important financial support to the utility during the deferral period.

Accounting Deferral for the Four Corners SCR and OMP

Q. What does APS propose in its rebuttal for continuing the Four Corners SCR and OMP accounting deferrals?

A. APS witness Blankenship's Rebuttal Testimony on page 17 indicates that APS proposes to continue to defer costs related to the Four Corners SCR and OMP through the rate effective date and to address any differential in its next rate case Application. Specifically, APS proposes to continue to apply deferred cost accounting for the Four Corners SCR and OMP costs from January 1, 2021, which was the rate effective date that APS had assumed in its original Application, to the actual rate effective date. APS proposes to address those additional deferred balances from January 1, 2021, until the rate effective date, in the Company's next rate case proceeding.

Q. Does Staff agree with this APS proposal?

A. Generally, yes. Staff recognizes that the rate effective date for new base rates in this case is no longer anticipated to be January 1, 2021 and that APS will have some costs for these items after January 1, 2021 and before new base rates for APS are set. Continuing the deferred accounting for these costs for that tail-end period, consisting of the months in 2021 prior to establishment of new base rates for APS therefore appears reasonable and consistent with the settlement reached in APS's last rate case. Consequently, Staff is not opposed to APS's proposal for deferred accounting for the Four Corners SCR and OMP costs from January 1, 2021, to the actual rate effective date for new APS rates in the current rate case, or APS's related proposal to defer and address such tail-end deferrals in APS's next rate case.

Accounting Deferral for Property Taxes

Q. Please discuss APS's accounting deferral related to property taxes.

A. As discussed on pages 28-29 of Ms. Blankenship's Direct Testimony, in the Settlement Agreement from APS's last rate case, the Company was allowed to defer for later recovery, or refund a portion of changes in its Arizona property taxes. Pursuant to that Settlement Agreement, APS has included pro forma adjustments to rate base and operating expenses in the current case related to the property tax deferral that resulted from the Settlement Agreement in APS's last rate case. At pages 19-20 of her rebuttal, APS witness Blankenship states that APS disagrees with ending the property tax deferral because property taxes can fluctuate significantly year-over-year and represent costs that the Company cannot control. She states that allowing the deferral does not impact this case and does not guarantee recovery in subsequent rate cases, but merely preserves APS's ability to recover or refund such costs should the Commission find them reasonable and prudent at the time actual recovery is sought.

Q. In the current proceeding, is APS requesting to continue accounting deferrals for property tax?

A. Yes. As discussed on pages 41 through 42 of her Testimony, and pages 19-20 of her Rebuttal Testimony, Ms. Blankenship states that the Company seeks to continue property tax accruals. Specifically, in accordance with the provisions of Accounting Standards Codification ("ASC") 980, APS proposes to be allowed to defer for future recovery, 100 percent of all changes to Arizona property tax expense above or below the adjusted test year level of \$177 million that are caused by changes to the applicable Arizona composite property tax rate.⁷ The Company proposes to track and record the deferral in the same manner as it is currently done, and to recover the deferred balance in its next rate case. In

⁷ The Company's request does not include changes in the assessed value of property.

1 addition, the Company proposes to recover any positive balance from ratepayers over a 10-
2 year period and any negative balance will be refunded to ratepayers over a three-year
3 period.

4 **Q. Does Staff support a continuation of a property tax deferral for APS?**

5 A. No. The prior APS property tax deferrals were the result of settlements. APS has not
6 shown in the current proceeding that a continuation is necessary.

7
8 Accounting Deferral for Cloud Computing Costs

9 **Q. One of APS's other deferrals relates to Cloud Computing costs. Are you**
10 **recommending an adjustment to the Company's proposal to include capitalized cloud**
11 **computing costs in rate base at this time?**

12 A. No. Staff has accepted APS's proposal to include Cloud Computing in rate base and is not
13 recommending an adjustment at this time.

14
15 **APS SURCHARGES**

16 APS's Current Surcharges/Riders/Adjustment Mechanisms

17 **Q. What surcharges or rate riders does APS currently have?**

18 A. APS currently has the following surcharges or riders:

- 19 • Renewable Energy Adjustment Clause ("REAC")
 - 20 • Demand-Side Management Adjustment Clause ("DSMAC")
 - 21 • Environmental Improvement Surcharge ("EIS")
 - 22 • Lost Fixed Cost Recovery Mechanism ("LFCR")
 - 23 • Transmission Cost Adjustor ("TCA")
 - 24 • Power Supply Adjustor ("PSA")
 - 25 • Tax Expense Adjustor Mechanism ("TEAM")
- 26
27
28
29
30
31
32
33

1 I will address certain aspects of APS's proposed riders in additional detail below.
2

3 **TEAM**

4 **Q. Does APS now propose to retain the TEAM?**

5 A. Yes. The TEAM passes through the tax savings that resulted from the federal Tax Cuts
6 and Jobs Act of 2017 ("TCJA"). In its original Application, APS proposed to end the
7 TEAM. However, in his Rebuttal Testimony at page 14, APS witness Snook indicates that
8 APS now proposes to retain the TEAM rather than eliminate it. APS proposes to use the
9 TEAM to continue to return to customers the amortization of protected excess ADIT as
10 well as retain the mechanism in anticipation of future changes to federal or state income
11 tax policy.
12

13 **Q. What is Staff's position on APS retaining the TEAM rather than eliminating it?**

14 A. Staff is not opposed to retaining the TEAM. Staff is reviewing APS's November 30, 2020
15 filing (the "40-252 filing" described in APS's responses to Staff DR 31.1 and 31.2),
16 wherein APS has proposed to continue the TEAM bill credit into 2021.
17

18 **New Advanced Energy Mechanism**

19 **Q. Has APS proposed a new rider in its Rebuttal Testimony?**

20 A. Yes. APS proposes a new AEM in its Rebuttal Testimony.
21

1 **Q. Was this mechanism proposed by APS in its rate case Application?**

2 A. No. The AEM was introduced in APS witness Guldner's Rebuttal Testimony⁸ and
3 discussed in APS witness Lockwood's Rebuttal Testimony⁹ as well as APS witness
4 Snook's Rebuttal Testimony¹⁰.

5
6 **Q. Did you review the Rebuttal Testimony of APS witnesses Guldner, Lockwood, and
7 Snook prior to preparing your Surrebuttal Testimony?**

8 A. Yes, I did.
9

10 **Q. What costs would be recoverable through APS's proposed AEM?**

11 A. The AEM would provide for recovery of the capital cost and expense of clean energy
12 investments not already recovered in base rates or through another adjustment mechanism.
13 A proposed Coal Community Transition ("CCT") cost would also be recovered through
14 the proposed AEM. I address the CCT separately in the next section of my Surrebuttal
15 Testimony.
16

17 **Q. How does APS propose that its clean plan investments would be determined?**

18 A. Every three years, APS will file with the Commission a request for Approval of Load
19 Forecast and Needs Assessment. The Commission will then issue an order approving a
20 load forecast and needs assessment, and the Company will issue an All-Source Request for
21 Information ("ASRFI") in accordance with the decision.¹¹
22

23 Based upon the results of the ASRFI, the Company will develop an Integrated Resource
24 Plan with a preferred portfolio of resources over a future 15-year period. After the

⁸ Ibid., Page 7.

⁹ APS Rebuttal Testimony of Barbara Lockwood, Pages 7-8.

¹⁰ APS Rebuttal Testimony of Leland Snook, Pages 15-16.

¹¹ Energy Rules, R14-2-2707 (not yet in effect).

1 evaluation and consideration of all parties, Staff will recommend a resource portfolio, and
2 the Commission will vote on a resource portfolio (either Staff's or a modified version) to
3 be implemented by the Company.¹² APS will issue an All-Source Request for Proposal
4 ("ASRFP") to achieve the approved resource portfolio, with the first five years constituting
5 the Company's approved Action Plan.¹³

6
7 The LSE may request recovery of the costs associated with achieving APS commission-
8 approved resource portfolio (and action plan) in a rate case. Only investments deemed
9 prudent and approved by the Commission would be eligible to have their costs recovered
10 through the proposed AEM.¹⁴

11
12 **Q. Does APS indicate that costs that are currently being addressed in other mechanisms**
13 **could become recoverable through the Company's proposed AEM?**

14 A. Yes. APS witness Snook suggests that the AEM could be modified to include the existing
15 Demand-Side Management Adjustment Charge ("DSMAC"), Renewable Energy
16 Adjustment Charge ("REAC"), and Lost Fixed-Cost Recovery ("LFCR") mechanisms in
17 the future.¹⁵

18
19 **Q. Why is APS seeking the AEM to meet its Clean Energy Commitment?**

20 A. According to APS witness Guldner, without an AEM or equivalent mechanism, "progress
21 in this transition [to a clean energy future] will be slowed, creating a significant burden on
22 the Commission, the Company, and intervenors due to the frequency of rate cases required
23 to recover investments. Further, meeting our clean energy commitments without

¹² Energy Rules, R14-2-2708 (not yet in effect).

¹³ Energy Rules, R14-2-2709 (not yet in effect).

¹⁴ Energy Rules, R14-2-2718 (not yet in effect).

¹⁵ APS Rebuttal Testimony of Leland Snook, Page 15, Lines 20-24.

1 contemporaneous recovery will pressure the credit quality of the Company and,
2 consequently, our credit ratings.”¹⁶

3
4 **Q. Did APS include a proposed Plan of Administration for the AEM?**

5 A. No.

6
7 **Q. Can APS meet its Clean Energy Plan in the absence of a new adjustor mechanism**
8 **such as the AEM?**

9 A. Yes. While APS witness Guldner maintains that “it would be very difficult,”¹⁷ APS
10 witness Snook states in his Rebuttal Testimony, the Company could use existing adjustors
11 — DSMAC, REAC, and LFCR — for recovery of its clean energy plan, with CCT funding
12 added to base rates.¹⁸ Staff agrees with this assessment, but recommends that APS develop
13 a Plan of Administration for an adjustor mechanism to recover the Company’s CCT costs,
14 and no other costs.

15
16 **Q. Does Staff recommend approval of the proposed AEM?**

17 A. No. The AEM was introduced very late in the rate case process, making the appropriate
18 evaluation problematic within the confines of the current rate case. Furthermore, the AEM,
19 as proposed by the Company, is merely conceptual in nature and lacks the specificity
20 necessary to recommend approval at this time. Staff has submitted a data request to the
21 Company for more detail regarding the proposed AEM but does not expect a timely
22 response before this Testimony is filed.

23

¹⁶ APS Rebuttal Testimony of Jeffrey Guldner, Page 7, Lines 11-20.

¹⁷ Ibid., Page 7, Line 13.

¹⁸ APS Rebuttal Testimony of Leland Snook, Page 16, Lines 17-20.

Coal Community Transition Commitment

Q. What amounts of cost for the CCT commitment were identified by APS in its Rebuttal Testimony for recovery from ratepayers?

A. APS witnesses Guldner, Lockwood and Snook discuss the APS CCT commitment costs in their Rebuttal Testimony. APS witness Guldner's Rebuttal Testimony at page 9 states that APS proposes a total of \$128.75 million for its CCT commitment, with \$23.75 million of that being funded from shareholders.¹⁹ Mr. Guldner's Rebuttal Testimony at page 9 also mentions \$110 million "over ten years for a transition, as well as funding for electrification efforts, transmission development and regional economic development efforts."

APS witness Lockwood's Rebuttal Testimony at page 8 includes a table with a \$13 million amount shown under Adjustor Changes for the AEM. APS witness Snook's Rebuttal Testimony at page 12 includes a similar table with \$13 million identified for the AEM under the heading "Rebuttal Adjustor Impact." Details supporting those tables in Excel files provided by APS in conjunction with its Rebuttal Testimony indicate that APS appears to be initially requesting \$13.35 million in annual funding from ratepayers related to the Company's CCT commitment. As noted above, APS has proposed recovery of that through a new adjustor, the AEM, which APS identified for the first time in its Rebuttal Testimony.

Q. Is Staff seeking additional information concerning the Company's CCT commitment?

A. Yes. Staff has issued discovery to APS to obtain a better understanding of how APS derived the amounts and the Company-proposed sharing between customers and shareholders for the CCT commitment but does not expect a timely response before this Testimony is filed.

¹⁹ Subtracting the \$23.75 million of APS proposed shareholder funding from the APS proposed total amount of \$128.75 million, would apparently leave \$105 million as the amount APS is seeking to recover from ratepayers.

1 **Q. Is APS the only Arizona utility affected by coal community transition?**

2 A. No. APS is not the only electric utility regulated by the Commission that has ownership
3 interests in coal-fueled generation facilities. Other Arizona utilities, such as Tucson
4 Electric Power Company ("TEP"), also have ownership interests in coal fired generation
5 facilities and thus could also be affected by coal community transition. For this reason,
6 Staff recommends that the Commission consider establishing a generic proceeding to
7 address coal community transition commitments and to explore options for cost recovery.
8

9 **Q. APS rebuttal witnesses Lockwood and Guldner discusses the potential for**
10 **securitization in her Rebuttal Testimony. Do they indicate whether APS's CCT**
11 **commitment costs could potentially be included in a pool of costs related to**
12 **transitioning out of coal-fired generation that might be considered for cost recovery**
13 **via securitization?**

14 A. No, not specifically. APS witness Lockwood's Rebuttal Testimony at pages 13-19 discuss
15 the concept of securitization in conjunction with her discussion of Four Corners costs. She
16 does not specifically address applying securitization for the costs related to APS's CCT
17 commitment.
18

19 APS's witness Guldner's Rebuttal Testimony at page 8 discusses the concept and potential
20 benefits of securitization. He states that "securitization of retiring assets, combined with
21 an adjustor mechanism, are tools that can reduce the rate impacts of transitioning to a clean
22 energy future." The Company's CCT commitment would seem to be a component of
23 APS's transitioning to a clean energy future.
24

25 Mr. Guldner's Rebuttal Testimony at page 8 continues by stating that securitization has not
26 yet been used in Arizona, and new enabling legislation is believed by APS to be needed.

1 He indicates that securitization is a complex topic, and needs to be done appropriately to
2 provide the intended benefits to all parties. He concludes by stating that: "APS is
3 committed to pursuing securitization and looks forward to working with the necessary
4 parties to make it happen in the interest of our customers."

5
6 **Q. Does Staff recommend that the topics of securitization and costs related to**
7 **transitioning to a clean energy future be addressed in a generic proceeding?**

8 A. Yes.
9

10 **Q. How has Staff reflected the APS CCT commitment costs in its surrebuttal**
11 **presentation?**

12 A. Staff has not included the Company's CCT commitment costs that were identified by APS
13 in its Rebuttal Testimony as an addition to APS's cost of service that would be recoverable
14 in new base rates. Staff is also recommending against adoption of APS's proposed new
15 AEM.
16

17 **Q. Should APS have a narrowly tailored CCT commitment rider to address the recovery**
18 **of CCT commitment costs?**

19 A. Staff believes that there could be merit in APS having a narrowly targeted CCT rider which
20 would address the recovery of the Company's CCT commitment costs, and no other costs.
21 Staff therefore recommends that APS be required to develop a Plan of Administration for
22 CCT commitment costs. On Attachment RCS-9, Schedule A, lines 8 and 17, the cost
23 recovery for the Company's CCT commitment is being reflected in Staff's surrebuttal
24 presentation as occurring in a specific limited CCTC adjustor, rather than as part of new
25 base rates for APS.
26

1 **Q. Is Staff recommending a specific initial funding amount for the CCTC adjustor at**
2 **this time?**

3 A. No. APS's Rebuttal Testimony indicates that securitization could potentially result in cost
4 savings and reducing the rate impacts of transitioning to a clean energy future. Staff
5 recommends that the possibility of securitizing CCT commitment costs that the
6 Commission determines should be recovered from ratepayers be first addressed before
7 authorizing cost recovery in a CCTC adjustor. Additionally, as noted above, Staff believes
8 that additional details are needed concerning APS's proposed CTC commitment costs and
9 APS's proposed allocation of those amounts between ratepayer recovery and shareholder
10 funding. Finally, Staff notes that the CCT issues affect other Arizona utilities, not just
11 APS, and thus developing a consistent framework and exploring potential benefits of
12 securitization in a generic proceeding could have merit.

13
14 LFCR

15 **Q. How has APS proposed to treat that LFCR revenue in its base rate revenue**
16 **requirement?**

17 A. As explained by APS witness Mr. Snook on pages 2 through 3 of his Direct Testimony,
18 due to concerns raised in APS's last rate case relating to the delayed reset of the LFCR
19 mechanism, APS has proposed in its current base rate case to leave the portion of the lost
20 fixed costs that are presently collected in the LFCR in the amount of \$39.792 million (ACC
21 jurisdictional) within that mechanism, rather than transferring it to base rates. This
22 treatment is being proposed by APS to ensure that the estimated bill impacts set forth by
23 APS are what customers can expect on the rate effective date.

24
25 In his Rebuttal Testimony at page 13, Mr. Snook states that, although APS has no
26 theoretical objection to transferring all unrecovered fixed costs recoverable under the

1 LFCR rider to base rates, the mechanics of this are complicated, as APS's last rate case
2 demonstrated, and the bill impact is difficult to explain to customers. He states further that
3 neither APS nor Staff recommended such a course of action at this time.
4

5 **Q. Does Staff agree with that treatment in the current APS base rate case?**

6 A. Yes. Leaving the portion of the lost fixed costs that are presently collected in the LFCR in
7 the amount of \$39.792 million (ACC jurisdictional) within that LFCR, rather than
8 transferring it to base rates, should facilitate a clearer presentation of estimated bill impacts
9 by APS and other parties concerning what customers can expect on the rate effective date,
10 and should thus help avoid some of the confusion about customer bill impacts that
11 customers of APS experienced from APS's last base rate case.
12

13 **Q. Does this conclude your Surrebuttal Testimony?**

14 A. Yes, it does.

Arizona Public Service Company
Docket No. E-01345A-19-0236
Attachment RCS-9
Staff Revenue Requirement Summary and Adjustment Schedules
Accompanying the Surrebuttal Testimony of Ralph C. Smith

Schedule	Description	Pages	Confidential	Exhibit Page No.	Revised or Added for Surrebuttal?
Revenue Requirement Summary Schedules					
A	Calculation of Revenue Deficiency (Sufficiency)	2	No	2-3	Revised
A-1	Gross Revenue Conversion Factor	1	No	4	Revised
B	Adjusted Rate Base	1	No	5	Revised
B.1	Summary of Adjustments to Rate Base	2	No	6-7	Revised
C	Adjusted Net Operating Income	1	No	8	Revised
C.1	Summary of Net Operating Income Adjustments	2	No	9-10	Revised
D	Capital Structure and Cost Rates	1	No	11	Revised
Rate Base Adjustments					
B-1	Post-Test Year Plant - Fossil Generation	1	No	12	
B-2	Post-Test Year Plant - Nuclear Generation	1	No	13	
B-3	Post-Test Year Plant - Distribution and IT/Facilities	1	No	14	Revised
B-4	Post-Test Year Plant - Technology Innovation	1	No	15	
B-5	Post-Test Year Plant - Renewables	1	No	16	
B-6	Accumulated Depreciation Related to Post-Test Year Plant	1	No	17	Revised
B-7	Accumulated Deferred Income Taxes Related to Post-Test Year Plant	1	No	18	Revised
B-8	Four Corners SCR Deferral	1	No	19	Revised
B-9	AMI Meters for Customer Growth	1	No	20	Now Included in Schedule B-3
B-10	Prepaid Directors and Officers Liability Insurance	1	No	21	
B-11	Costs for Damaged and Retired McMicken Battery Energy Storage Facility	1	No	22	
B-12	Cash Working Capital	3	No	23-25	Revised
B-13	West Phoenix Disallowance	1	No	26	Added
B-14	Property Tax Deferral	1	No	27	Added
B-15	Ocotillo Deferral	1	No	28	Added
B-16	Excess Deferred Taxes	1	No	29	Added
B-17	TEAM Balancing Accounts	1	No	30	Added
B-18	APS Lease Reclassification	1	No	31	Added
B-19	APS RCND Differences	1	No	32	Added
Net Operating Income Adjustments					
C-1	Miscellaneous Out of Period Costs	1	No	33	
C-2	Injuries and Damages	1	No	34	
C-3	UARG and USWAG Membership Dues	1	No	35	
C-4	Depreciation Expense Post-Test Year Plant At Current Depreciation Rates	1	No	36	Revised
C-5	Property Tax Expense - Post-Test Year Plant	1	No	37	Revised
C-6	AMI Meters Depreciation Expense	1	No	38	Withdrawn
C-7	Directors and Officers Liability Insurance Expense	1	No	39	
C-8	Incentive Compensation Expense	1	No	40	
C-9	Executive Compensation - Housing, Retention Bonuses, Financial Planning and Physicals	1	No	41	
C-10	Interest Synchronization	1	No	42	Revised
C-11	Base Cost of Fuel and Purchased Power	1	No	43	
C-12	Interest on Customer Deposits	1	No	44	
C-13	Four Corners SCR Deferral Amortization	1	No	45	Revised
C-14	Depreciation Expense - New Depreciation Rates Using SFAS 143 Method for Cost of Removal	1	No	46	Revised
C-14.1	Depreciation Expense - Summary of Company's Test Year Recorded Amounts and Adjustment for New Depreciation Rates and for Non-Studied Assets	1	No	47	
C-14.2	Company Derivation of Estimated Dismantlement Costs with Future Inflation Included in Company-Proposed Depreciation Rates	1	No	48	
C-14.3	Accrual Rates for Estimated Dismantlement Cost Without Estimated Future Inflation	1	No	49	
C-14.4	Accrual Rates for Estimated Dismantlement Costs with Inflation Through the Test Year	1	No	50	
C-14A	Depreciation Expense - Nuclear Excess Reserve Amortization	1	No	51	Added
C-14B	Depreciation Expense - 40 Year Life for AZ Sun	1	No	52	Added
C-15	Depreciation Expense on Post-Test Year Plant - At New Depreciation Rates	1	No	53	Revised
C-16	Expenses Related to Damaged and Retired McMicken Battery Energy Storage Facility	1	No	54	Revised
C-17	Normalize Pension and Post Retirement Employee Benefit Expenses	1	No	55	Added
C-18	Adjust for Test Year AG-X Revenue Recovered in the PSA	1	No	56	Added
C-19	Transmission Expense Correction	1	No	57	Added
C-20	TEAM Balancing Account	1	No	58	Added
C-21	Crisis Bill	1	No	59	Added
C-22	Ocotillo Modernization	1	No	60	Added
C-23	West Phoenix Disallowance	1	No	61	Added
C-24	Annualize Property Taxes	1	No	62	Added
C-25	Amortize Property Tax Deferral	1	No	63	Added
Total Pages, Including Content Listing		63			

Line No.	Description	Reference	APS Proposed Original		Staff Proposed		Difference
			Original Cost (A)	Fair Value (B)	Original Cost (C)	Fair Value Alt 1 (D1) Alt 2 (D2)	Fair Value (E)=D2-B
1	Adjusted Rate Base	Sch. B	\$ 8,872,984	\$ 12,310,263	\$ 8,899,362	\$ 12,318,476	\$ 8,213
2	Rate of Return	Sch. D	7.41%	5.62%	7.00%	5.06%	5.14%
3	Operating Income Required		\$ 657,488	\$ 691,837	\$ 622,955	\$ 623,315	\$ (68,522)
4	Net Operating Income Available	Sch. C	\$ 640,218	\$ 640,218	\$ 674,400	\$ 674,400	\$ 34,182
5	Operating Income Excess/Deficiency		\$ 17,270	\$ 51,619	\$ (51,445)	\$ (51,085)	\$ (102,704)
6	Gross Revenue Conversion Factor	Sch. A-1	1.3288	1.3288	1.3346	1.3346	1.3346
7	Revenue Deficiency (Sufficiency)		\$ 22,949	\$ 68,591	\$ (68,658)	\$ (68,178)	\$ (123,827)
8	Fair Value Increment			\$ 45,643		\$ 480	\$ 13,422
9	Percentage Increase Over Current Rates						
10	Revenue from Sales to Ultimate Retail Customers	Sch. C, L.1		\$ 3,279,191	\$	\$ 3,280,441	\$ 3,280,441
	Percentage Change	L7/L9		2.09%		-2.08%	-1.68%
				See below for detail			See below for detail

Notes and Source

Cols. A & B taken from APS filing, Schedule A-1 and Attachment LRS-2DR, page 1 of 1

Base Rate Increase Inclusive of Adjustor Transfers

Description	APS Proposed - Original Filing		APS Proposed - Rebuttal Filing		Staff Proposed	
	Amount (F)	Percent Change (G)	Amount (H)	Percent Change (I)	Amount (J)	Percent Change (K)
11 Total Revenue Deficiency	\$ 183,634	5.60%	\$ 168,824	5.15%	\$ 59,808	1.82%
12 Tax Expense Adjustor Mechanism (TEAM)	\$ (119,252)	-3.64%	\$ (119,252)	-3.64%	\$ (119,252)	-3.64%
13 Environmental Improvement Surcharge (EIS)	\$ 3,888	0.12%	\$ 3,888	0.12%	\$ 3,888	0.12%
14 Renewable Energy Adjustment Charge (REAC)	\$ 321	0.01%	\$ 321	0.01%	\$ 321	0.01%
15 Advanced Energy Mechanism (AEM)			\$ (13,350)	-0.41%	\$	0.00%
16 Coal Community Transition Commitment (CCTC) - Funding to be Determined	\$ (115,043)	-3.51%	\$ (128,393)	-3.91%	\$ (115,043)	-3.51%
17 Net Adjustor Changes	\$ 68,591	2.09%	\$ 40,470	1.23%	\$ (55,235)	-1.68%
18 Net Base Rate Increase (Decrease)						

Arizona Public Service Company
Revenue Requirement Reconciliation
Test Year Ended June 30, 2019

Docket No. E-01345A-19-0236
Schedule A
Page 2 of 2
Revised for Surrebuttal

(Thousands of Dollars)

Line No.	Description	Schedule	Staff Adjusted Rate Base (A)	Conversion Factor (B)	Equivalent Revenue Requirement Amount (C)
1	Rate of return difference	D		-0.41%	
2	Staff GRCF	A-1		1.3346	
3	Rate Base			-0.547186%	
4	Original Cost Rate Base per APS' Original Filing	B	\$ 8,872,984		\$ (48,552)
5	Staff ROR	D		7.00%	
6	Staff ROR x GRCF			9.34%	
Effect of Staff adjustments to Rate Base					
7	Post-Test Year Plant - Fossil Generation	B-1	\$ 37,075	9.34%	\$ 3,464
8	Post-Test Year Plant - Nuclear Generation	B-2	\$ (5,591)	9.34%	\$ (522)
9	Post-Test Year Plant - Distribution and IT/Facilities	B-3	\$ (51,505)	9.34%	\$ (4,812)
10	Post-Test Year Plant - Technology Innovation	B-4	\$ (11,259)	9.34%	\$ (1,052)
11	Post-Test Year Plant - Renewables	B-5	\$ (7,316)	9.34%	\$ (683)
12	Accumulated Depreciation Related to Post-Test Year Plant	B-6	\$ 26,671	9.34%	\$ 2,492
13	Accumulated Deferred Income Taxes Related to Post-Test Year Plant	B-7	\$ (53,741)	9.34%	\$ (5,021)
14	Four Corners SCR Deferral	B-8	\$ (269)	9.34%	\$ (25)
15	AMI Meters for Customer Growth	B-9	\$ -	9.34%	\$ -
16	Prepaid Directors and Officers Liability Insurance	B-10	\$ (145)	9.34%	\$ (14)
17	Costs for Damaged and Retired McMicken Battery Energy Storage Facility	B-11	\$ (1,041)	9.34%	\$ (97)
18	Cash Working Capital	B-12	\$ 4,957	9.34%	\$ 463
19	West Phoenix Disallowance	B-13	\$ 12	9.34%	\$ 1
20	Property Tax Deferral	B-14	\$ (6,103)	9.34%	\$ (570)
21	Ocotillo Deferral	B-15	\$ 2,686	9.34%	\$ 251
22	Excess Deferred Taxes	B-16	\$ 85,391	9.34%	\$ 7,977
23	TEAM Balancing Accounts	B-17	\$ 6,556	9.34%	\$ 612
24	APS Lease Reclassification	B-18	\$ -	9.34%	\$ -
25	APS RCND Differences	B-19	\$ -	9.34%	\$ -
26	Total Staff Original Cost Rate Base Adjustments		\$ 26,378		
27	Staff Adjusted Original Cost Rate Base		<u>\$ 8,899,362</u>		

		Staff Revenue and Expense Adjs. (D)	Staff Adjusted Net Operating Income (E)	
Net Operating Income				
28	Net Operating Income per APS's Original Filing		\$ 640,218	
Effect of Staff Adjustments on NOI				
29	Miscellaneous Out of Period Costs	C-1	\$ (636)	\$ 479 1.33460 \$ (639)
30	Injuries and Damages	C-2	\$ 187	\$ (141) 1.33460 \$ 188
31	UARG and USWAG Membership Dues	C-3	\$ (213)	\$ 160 1.33460 \$ (214)
32	Depreciation Expense Post-Test Year Plant At Current Depreciation Rates	C-4	\$ (5,002)	\$ 3,764 1.33460 \$ (5,024)
33	Property Tax Expense - Post-Test Year Plant	C-5	\$ (934)	\$ 703 1.33460 \$ (938)
34	AMI Meters Depreciation Expense	C-6	\$ -	\$ - 1.33460 \$ -
35	Directors and Officers Liability Insurance Expense	C-7	\$ (360)	\$ 271 1.33460 \$ (362)
36	Incentive Compensation Expense	C-8	\$ (18,709)	\$ 14,079 1.33460 \$ (18,790)
37	Executive Compensation - Housing, Retention Bonuses, Financial Planning and Physicals	C-9	\$ (242)	\$ 182 1.33460 \$ (243)
38	Interest Synchronization	C-10	\$ -	\$ 121 1.33460 \$ (161)
39	Base Cost of Fuel and Purchased Power	C-11	\$ 33,751	\$ (25,399) 1.33460 \$ 33,898
40	Interest on Customer Deposits	C-12	\$ (847)	\$ 637 1.33460 \$ (850)
41	Four Corners SCR Deferral Amortization	C-13	\$ (73)	\$ 55 1.33460 \$ (73)
42	Depreciation Expense - New Depreciation Rates Using SFAS 143 Method for Cost of Removal	C-14	\$ (12,134)	\$ 9,131 1.33460 \$ (12,186)
43	Depreciation Expense - Nuclear Excess Reserve Amortization	C-14A	\$ (17,265)	\$ 12,993 1.33460 \$ (17,340)
44	Depreciation Expense - 40 Year Life for AZ Sun	C-14B	\$ (6,709)	\$ 5,049 1.33460 \$ (6,738)
45	Depreciation Expense on Post-Test Year Plant - At New Depreciation Rates	C-15	\$ (267)	\$ 201 1.33460 \$ (268)
46	Expenses Related to Damaged and Retired McMicken Battery Energy Storage Facility	C-16	\$ (963)	\$ 725 1.33460 \$ (967)
47	Normalize Pension and Post Retirement Employee Benefit Expenses	C-17	\$ (12,853)	\$ 9,673 1.33460 \$ (12,909)
48	Adjust for Test Year AG-X Revenue Recovered in the PSA	C-18	\$ (15,000)	\$ 11,288 1.33460 \$ (15,065)
49	Transmission Expense Correction	C-19	\$ 17,576	\$ (13,227) 1.33460 \$ 17,653
50	TEAM Balancing Account	C-20	\$ 656	\$ (494) 1.33460 \$ 659
51	Crisis Bill	C-21	\$ (1,250)	\$ - 1.33460 \$ -
52	Ocotillo Modernization	C-22	\$ 306	\$ (230) 1.33460 \$ 307
53	West Phoenix Disallowance	C-23	\$ -	\$ - 1.33460 \$ -
54	Annualize Property Taxes	C-24	\$ (1,499)	\$ 1,128 1.33460 \$ (1,505)
55	Amortize Property Tax Deferral	C-25	\$ (4,081)	\$ 3,034 1.33460 \$ (4,049)
56	Total Staff Adjustments to Pre-Tax Income and to Operating Income		<u>\$ (46,561)</u>	<u>\$ 34,182</u>
57	Staff Adjusted Net Operating Income			<u>\$ 674,400</u>
Gross Revenue Conversion Factor Difference:				
58	Per Staff			1.33460
59	Per Company			1.32880
60	Difference			0.00580
61	Company adjusted NOI deficiency			\$ 17,270
62	GRCF difference			\$ 100
63	STAFF REVENUE REQUIREMENT ADJUSTMENTS IDENTIFIED ABOVE			\$ (91,604)
64	Company requested Base Rate Revenue Increase on OCRB	Schedule A, page 1, column A, line 7		\$ 22,949
65	Reconciled Revenue Requirement			\$ (68,655)
66	Revenue Requirement Calculated on OCRB	Schedule A, page 1, column C, line 7		\$ (68,658)
67	Unidentified Difference			\$ 3

Notes and Source

Pre-tax return computed using Gross Revenue Conversion Factor

Arizona Public Service Company
Computation of Gross Revenue Conversion Factor

Docket No. E-01345A-19-0236
Schedule A-1
Page 1 of 1
Revised for Surrebuttal

Test Year Ended June 30, 2019
(Thousands of Dollars)

Line No.	Description	Company (A)	Staff Proposed (B)
1	Gross Revenue	100.00%	100.00%
2	Less: Uncollectible Revenue		0.41%
3	Taxable Income as a Percent	100.00%	99.59%
4	Less: Federal Income Taxes	21.00%	20.91%
5	Taxable Income as a Percent	79.00%	78.68%
6	Less: State Income Taxes	3.75%	3.75%
7	Change in Net Operating Income	75.25%	74.93%
8	Gross Revenue Conversion Factor	1.3288	1.3346
9	Combined state and federal income tax rate	24.75%	24.66%

Notes and Source

Col.A: APS Filing, Schedule C-3

Col. B: Staff included the uncollectible rate of 0.41% per Company workpaper JEH-WP5DR

Components of Revenue Requirement Increase (\$000's)

	Percent (C)	Fair Value Alt 1 (D)	Fair Value Alt 2 (E)
10	Net Income	74.93%	\$ (51,086)
11	Federal Income Taxes	20.91%	\$ (14,259)
12	State Income Taxes	3.75%	\$ (2,554)
13	Uncollectibles	0.41%	\$ (280)
14	Total Revenue Increase	100.00%	\$ (68,178)
15	Total Revenue Increase per Schedule A	\$ (68,178)	\$ (55,235)
14	Difference	\$ (0)	\$ 0

Line No.	Description	Original Cost			RCND		
		bv APS (A)	Staff Adjustments (B)	As Adjusted bv Staff (C)	bv APS (D)	Staff Adjustments (E)	As Adjusted bv Staff (F)
1	Gross Utility Plant in Service	\$ 18,264,729	\$ (38,954)	\$ 18,225,774	\$ 34,340,989	\$ (422,711)	\$ 33,918,278
2	Less: Accumulated Depreciation	\$ (6,863,807)	\$ 25,630	\$ (6,838,176)	\$ (13,304,371)	\$ 151,546	\$ (13,152,825)
3	Net Utility Plant in Service	\$ 11,400,922	\$ (13,324)	\$ 11,387,598	\$ 21,036,618	\$ (271,165)	\$ 20,765,453
Deductions:							
4	Deferred Income Taxes	\$ (1,951,754)	\$ (52,318)	\$ (2,004,072)	\$ (3,648,164)	\$ (7,075)	\$ (3,655,239)
5	Deferred Investment Tax Credits	\$ (196,585)	\$ -	\$ (196,585)	\$ (196,585)	\$ -	\$ (196,585)
6	Customer Advances	\$ (145,118)	\$ -	\$ (145,118)	\$ (145,118)	\$ -	\$ (145,118)
7	Customer Deposits	\$ (81,423)	\$ -	\$ (81,423)	\$ (81,423)	\$ -	\$ (81,423)
8	Liabilities for Pension Benefits	\$ (280,177)	\$ -	\$ (280,177)	\$ (280,177)	\$ -	\$ (280,177)
9	Liability For Asset Retirement	\$ (741,379)	\$ -	\$ (741,379)	\$ (741,379)	\$ -	\$ (741,379)
10	Other Deferred Credits	\$ (10,827)	\$ -	\$ (10,827)	\$ (10,827)	\$ -	\$ (10,827)
11	Coal Mine Reclamation	\$ (196,800)	\$ -	\$ (196,800)	\$ (196,800)	\$ -	\$ (196,800)
12	Unrecognized Tax Benefits	\$ (35,241)	\$ -	\$ (35,241)	\$ (35,241)	\$ -	\$ (35,241)
13	Operating Lease Liabilities	\$ (99,615)	\$ 19,722	\$ (79,893)	\$ (99,615)	\$ 19,722	\$ (79,893)
14	Regulatory Liabilities	\$ (1,897,502)	\$ 85,391	\$ (1,812,112)	\$ (2,962,230)	\$ 261,658	\$ (2,700,572)
15	Total Deductions	\$ (5,636,420)	\$ 52,795	\$ (5,583,625)	\$ (8,397,558)	\$ 274,305	\$ (8,123,253)
Additions:							
16	Regulatory Assets	\$ 1,333,199	\$ 1,816	\$ 1,335,016	\$ 1,333,199	\$ 1,816	\$ 1,335,016
17	Other Deferred Debits	\$ 32,909	\$ -	\$ 32,909	\$ 32,909	\$ -	\$ 32,909
18	Nuclear Decommissioning Trust	\$ 945,886	\$ -	\$ 945,886	\$ 945,886	\$ -	\$ 945,886
19	Other Special Use Funds	\$ 240,398	\$ -	\$ 240,398	\$ 240,398	\$ -	\$ 240,398
20	Assets for Other Post-Retirement Benefits	\$ 48,297	\$ -	\$ 48,297	\$ 48,297	\$ -	\$ 48,297
21	Operating Lease Right-of-Use Assets	\$ 155,663	\$ (19,722)	\$ 135,941	\$ 155,663	\$ (19,722)	\$ 135,941
22	Allowance For Working Capital	\$ 352,129	\$ 4,812	\$ 356,942	\$ 352,129	\$ 4,812	\$ 356,942
23	Total Additions	\$ 3,108,482	\$ (13,093)	\$ 3,095,389	\$ 3,108,482	\$ (13,093)	\$ 3,095,389
24	Total Rate Base	\$ 8,872,984	\$ 26,378	\$ 8,899,362	\$ 15,747,542	\$ (9,953)	\$ 15,737,589

Notes and Source

Cols. A and D: APS filing, Schedule B-1

Fair Value Calculation		
	Per Company	Per Staff
	Original Cost	Original Cost
25	\$ 8,872,984	\$ 8,899,362
26	\$ 15,747,542	\$ 15,737,589
27	Total \$ 24,620,526	Total \$ 24,636,951
28	Average (Fair Value) \$ 12,310,263	Average (Fair Value) \$ 12,318,476

See Sch. A

[illegible]

Arizona Public Service Company
Adjusted Net Operating Income
ACC Jurisdictional
Test Year Ended June 30, 2019
(Thousand of Dollars)

Docket No. E-01345A-19-0236
Schedule C
Page 1 of 1
Revised for Surrebuttal

Line No.	Description	As Adjusted by APS (A)	Staff Adjustments (B)	As Adjusted by Staff (C)
Operating Revenues				
1	Revenues From Base Rates	\$ 3,279,191	\$ 1,250	\$ 3,280,441
2	Revenues From Surcharges	\$ 0	\$ 15,000	\$ 15,000
3	Other Electric Revenues	\$ 142,230	\$ -	\$ 142,230
4	Total Operating Revenues	<u>\$ 3,421,422</u>	<u>\$ 16,250</u>	<u>\$ 3,437,672</u>
Operating Expenses				
5	Fuel and Purchased Power	\$ 943,995	\$ 33,751	\$ 977,746
6	Operations and Maintenance	\$ 884,542	\$ (15,508)	\$ 869,035
7	Depreciation and Amortization	\$ 647,485	\$ (40,749)	\$ 606,737
8	Income Taxes	\$ 113,662	\$ 11,129	\$ 124,791
9	Taxes other than Income Taxes	\$ 191,519	\$ (6,556)	\$ 184,963
10	Total Operating Expenses	<u>\$ 2,781,204</u>	<u>\$ (17,932)</u>	<u>\$ 2,763,272</u>
11	Net Operating Income	<u><u>\$ 640,218</u></u>	<u><u>\$ 34,182</u></u>	<u><u>\$ 674,400</u></u>

Notes and Source

Col. A: APS Schedule C-1, page 2 of 2
Col. B: Staff Schedule C.1

Notes and Source

* Per APS filing Schedule C-3

Line No.	Description	Depreciation Expense - Nuclear Excess Reserve Amortization C-14A	Depreciation Expense - 40 Year Life for AZ Sun C-14B	Depreciation Expense on Post-Test Year Plant - At New Depreciation Rates C-15	Expenses Related to Damaged and Retired McMillan Battery Energy Storage Facility C-16	Normalize Pension and Retirement Expenses C-17	Adjust for Test Year AG-X Revenue Recovered in the PSA C-18	Transmission Expense Correction C-19	TEAM Balancing Account C-20	Crisis Bill C-21	Ocotillo Modernization C-22	West Phoenix Disallowance C-23	Annualize Property Taxes C-24	Amortize Property Tax Deferral C-25
		Added	Added	Revised	Revised	Added	Added	Added	Added	Added	Added	Added	Added	Added
	Operating Revenues													
1	Revenues From Base Rates						\$ 15,000			\$ 1,250				
2	Revenues From Surcharges													
3	Other Electric Revenues													
4	Total Operating Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,000	\$ -	\$ -	\$ 1,250	\$ -	\$ -	\$ -	\$ -
	Operating Expenses													
5	Fuel and Purchased Power													
6	Operations and Maintenance													
7	Depreciation and Amortization													
8	Taxes other than Income Taxes													
9	PRE-TAX OPERATING EXPENSES	\$ (17,265)	\$ (6,709)	\$ (267)	\$ (659)	\$ (12,853)	\$ -	\$ 17,576	\$ 656	\$ 1,250	\$ 306	\$ -	\$ (1,499)	\$ (4,081)
10	PRE-TAX OPERATING INCOME	\$ 17,265	\$ 6,709	\$ 267	\$ (963)	\$ 12,853	\$ 15,000	\$ (17,576)	\$ (656)	\$ -	\$ (306)	\$ -	\$ 1,499	\$ (4,081)
11	Income Taxes	\$ 4,272	\$ 1,660	\$ 66	\$ 238	\$ 3,180	\$ 3,712	\$ (4,349)	\$ (162)	\$ -	\$ (76)	\$ -	\$ 371	\$ 1,047
12	TOTAL OPERATING EXPENSES	\$ (12,993)	\$ (5,049)	\$ (201)	\$ (725)	\$ (9,673)	\$ 3,712	\$ 13,227	\$ 494	\$ 1,250	\$ 230	\$ -	\$ (1,128)	\$ (3,034)
13	OPERATING INCOME	\$ 12,993	\$ 5,049	\$ 201	\$ 725	\$ 9,673	\$ 11,288	\$ (13,227)	\$ (494)	\$ -	\$ (230)	\$ -	\$ 1,128	\$ 3,034

Notes and Sources
Combined Effective Tax Rate* 24.75%
* Per APS filing, Schedule C.3

Arizona Public Service Company
Capital Structure & Cost Rates

Docket No. E-01345A-19-0236

Schedule D

Page 1 of 1

Revised for Surrebuttal

Test Year Ended June 30, 2019
(Thousands of Dollars)

Line No.	Capital Source	Capitalization		Cost Rate	Weighted Avg. Cost of Capital
		Amount (A)	Percent (B)	(C)	(D)
APS - Proposed Cost of Capital					
1	Short-Term Debt	\$ -	0.00%		0.00%
2	Long-Term Debt	\$ 4,726,125	45.33%	4.10%	1.86%
3	Common Stock Equity	\$ 5,700,968	54.67%	10.15%	5.55%
4	Total Capital	<u>\$ 10,427,093</u>	<u>100.00%</u>		<u>7.41%</u>
APS - Proposed Fair Value Rate of Return					
5	Short-Term Debt	\$ -	0.00%		0.00%
6	Long-Term Debt	\$ 4,022,124	32.67%	4.10%	1.34%
7	Common Stock Equity	\$ 4,850,860	39.41%	10.15%	4.00%
8	FVRB Increment	\$ 3,437,279	27.92%	1.00%	0.28%
9	Total Capital	<u>\$ 12,310,263</u>	<u>100.00%</u>		<u>5.62%</u>
ACC Staff - Proposed Cost of Capital					
10	Short-Term Debt	\$ -	0.00%		0.00%
11	Long-Term Debt	\$ 4,726,125	45.33%	4.10%	1.86%
12	Common Stock Equity	\$ 5,700,968	54.67%	9.40%	5.14%
13	Total Capital	<u>\$ 10,427,093</u>	<u>100.00%</u>		<u>7.00%</u>
14	Difference (Line 13 - Line 4)				<u>-0.41%</u>
15	Weighted Cost of Debt				<u>1.86%</u>
ACC Staff - Proposed Fair Value Rate of Return - Alternative 1					
16	Short-Term Debt	\$ -	0.00%	0.00%	0.00%
17	Long-Term Debt	\$ 4,033,674	32.74%	4.10%	1.34%
18	Common Stock Equity	\$ 4,865,688	39.50%	9.40%	3.71%
19	Capital financing OCRB	\$ 8,899,362			
20	Appreciation above OCRB not recognized on utility's books	\$ 3,419,114	27.76%	0.0% [a]	0.00% [b]
21	Total capital supporting FVRB	<u>\$ 12,318,476</u>	<u>100.00%</u>		<u>5.06%</u>
ACC Staff - Proposed Fair Value Rate of Return - Alternative 2					
22	Short-Term Debt	\$ -	0.00%	0.00%	0.00%
23	Long-Term Debt	\$ 4,033,674	32.74%	4.10%	1.34%
24	Common Stock Equity	\$ 4,865,688	39.50%	9.40%	3.71%
25	Capital financing OCRB	\$ 8,899,362			
26	Appreciation above OCRB not recognized on utility's books	\$ 3,419,114	27.76%	0.30% [a]	0.08%
27	Total capital supporting FVRB	<u>\$ 12,318,476</u>	<u>100.00%</u>		<u>5.14%</u>

Notes and Source

Lines 1-4, APS filing Schedule D-1 and Attachment LRS-2DR, page 1 of 1

Lines 20 and 26, Col.A:

28	Fair Value Rate Base	\$ 12,318,476	Schedule A
29	Original Cost Rate Base	\$ 8,899,362	Schedule A
30	Difference	<u>\$ 3,419,114</u>	[b]

[a] Per Staff witness David Parcell

[b] The appreciation of Fair Value over Original Cost has not been recognized on the utility's books. Such off-book appreciation has not been financed by debt or equity capital recorded on the utility's books. The appreciation over Original Cost book value could therefore be recognized for cost of capital purposes at zero cost. However, for purposes of this rate case, Staff has utilized the two alternatives presented above to calculate APS's revenue requirement on the Fair Value Rate Base increment

Test Year Ended June 30, 2019
(Thousands of Dollars)

Line No.	Description	Per Company as of June 30, 2020		Company Rebuttal Filing		Per Staff as of June 30, 2020		Staff Adjustment	
		Company Original Filing	ACC	Total Company	ACC	Total Company	ACC	Total Company	ACC
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
1	Post Test Year Plant Additions	\$ 179,664	\$ 178,802	\$ 216,918	\$ 215,877	\$ 216,918	\$ 215,877	\$ 37,254	\$ 37,075

Notes and Source:

Col. A and B: APS Schedule B-2
Col. C and D: APS Rebuttal Schedule B-2
Col. E: Company's Supplemental Response to Staff 15.3
Col. F: Col. C x ACC Jurisdictional Factor
ACC Jurisdictional Factor derived below:

2	Per Company - ACC	\$ 178,802
3	Per Company - Total Company	\$ 179,664
4	ACC Jurisdictional Factor	0.995200

Test Year Ended June 30, 2019
(Thousands of Dollars)

Line No.	Description	Per Company as of June 30, 2020		Per Company as of June 30, 2020		Per Staff as of June 30, 2020		Staff Adjustment	
		Company Original Filing	Company Rebuttal Filing	Total Company	ACC	Total Company	ACC	Total Company	ACC
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
1	Post Test Year Plant Additions	\$ 73,326	\$ 72,974	\$ 67,708	\$ 67,383	\$ 67,708	\$ 67,383	\$ (5,618)	\$ (5,591)
Notes and Source:									
Col. A and B: APS Schedule B-2									
Col. C and D: APS Rebuttal Schedule B-2									
Col. E: Company's Supplemental Response to Staff 15.3									
Col. F: Col. C x ACC Jurisdictional Factor									
ACC Jurisdictional Factor derived below:									
2	Per Company - ACC	\$ 72,974							
3	Per Company - Total Company	\$ 73,326							
4	ACC Jurisdictional Factor	0.995200							

Test Year Ended June 30, 2019
(Thousands of Dollars)

Line No.	Description	Per Company as of June 30, 2020		Per Staff as of June 30, 2020		Staff Adjustment	
		Company Original Filing	Company Rebuttal Filing	Total Company	ACC	Total Company	ACC
		(A)	(B)	(C)	(F)	(G)	(H)
1	Post Test Year Plant Additions	\$ 470,435	\$ 454,743	\$ 418,060	\$ 403,237	\$ (52,375)	\$ (51,505)

Notes and Source:

Col. A and B: APS Schedule B-2

Col. C-F: Company's Rebuttal Attachment EAB-01RB and APS Rebuttal Schedule B-2

Test Year Ended June 30, 2019
(Thousands of Dollars)

Line No.	Description	Per Company as of June 30, 2020		Company Rebuttal Filing		Per Staff as of June 30, 2020		Staff Adjustment	
		Company Original Filing	ACC	Total Company	ACC	Total Company	ACC	Total Company	ACC
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
1	Post Test Year Plant Additions	\$ 25,446	\$ 25,446	\$ 14,187	\$ 14,187	\$ 14,187	\$ 14,187	\$ (11,259)	\$ (11,259)

Notes and Source:

Col. A and B: APS Schedule B-2
Col. C and D: APS Rebuttal Schedule B-2
Col. E: Company's Supplemental Response to Staff 15.3
Col. F: Col. C x ACC Jurisdictional Factor
ACC Jurisdictional Factor derived below:

2	Per Company - ACC	\$ 25,446
3	Per Company - Total Company	\$ 25,446
4	ACC Jurisdictional Factor	1.000000

Test Year Ended June 30, 2019
(Thousands of Dollars)

Line No.	Description	Per Company as of June 30, 2020				Per Staff as of June 30, 2020		Staff Adjustment	
		Company Original Filing		Company Rebuttal Filing		Total Company		Total Company	
		ACC	(B)	ACC	(D)	ACC	(F)	ACC	(H)
		Total Company	(A)	Total Company	(C)	Total Company	(E)	Total Company	(G)
1	Post Test Year Plant Additions	\$ 24,364	\$ 24,364	\$ 17,048	\$ 17,048	\$ 17,048	\$ 17,048	\$ (7,316)	\$ (7,316)

1	Post Test Year Plant Additions	\$ 24,364	\$ 24,364	\$ 17,048	\$ 17,048	\$ 17,048	\$ 17,048	\$ (7,316)	\$ (7,316)
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Notes and Source:

Col. A and B: APS Schedule B-2
Col. C and D: APS Rebuttal Schedule B-2
Col. E: Company's Supplemental Response to Staff 15.3
Col. F: Col. C x ACC Jurisdictional Factor
ACC Jurisdictional Factor derived below:

2	Per Company - ACC	\$ 24,364
3	Per Company - Total Company	\$ 24,364
4	ACC Jurisdictional Factor	1.000000

Line No.	Description	Per Company as of June 30, 2020		Per Staff as of June 30, 2020		Staff Adjustment	
		Total Company	ACC (A)	Total Company	ACC (D)	Total Company	ACC (F)
1	Fossil Generation	\$ (201,688)	\$ (200,720)	\$ (201,688)	\$ (200,720)	\$ -	\$ -
2	Nuclear Generation	\$ (36,557)	\$ (36,382)	\$ (17,283)	\$ (17,200)	\$ 19,274	\$ 19,181
3	Distribution and IT/Facilities	\$ (287,026)	\$ (276,835)	\$ (287,026)	\$ (276,835)	\$ -	\$ -
4	Technology Innovation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5	Renewables	\$ (33,094)	\$ (33,094)	\$ (25,604)	\$ (25,604)	\$ 7,490	\$ 7,490
6	Total	\$ (558,365)	\$ (547,031)	\$ (531,601)	\$ (520,359)	\$ 26,764	\$ 26,671

Notes and Source

Amounts represent a decrease (increase) to the jurisdictional Accumulated Depreciation balance and (decrease) increase to rate base

Cols A&B: APS Schedule B-2

Cols C&D: APS Rebuttal Schedule B-2 and Attachment EAB-01RB

Arizona Public Services
Accumulated Deferred Income Taxes Related to Post-Test Year Plant
Additions and Reductions to Rate Base

Test Year Ended June 30, 2019
(Thousands of Dollars)

Line No.	Description	Per Company as of June 30, 2020		Per Staff as of June 30, 2020		Staff Adjustment	
		Total Company (A)	ACC (B)	Total Company (C)	ACC (D)	Total Company (E)	ACC (F)
Deductions - ADIT							
1	Fossil Generation	\$ (10,896)	\$ (10,844)	\$ (63,748)	\$ (63,442)	\$ (52,852)	\$ (52,598)
2	Nuclear Generation	\$ 1,037	\$ 1,032	\$ (4,447)	\$ (4,426)	\$ (5,484)	\$ (5,458)
3	Distribution and IT/Facilities	\$ (5,634)	\$ (5,458)	\$ (2,284)	\$ (2,506)	\$ 3,351	\$ 2,952
4	Technology Innovation	\$ (777)	\$ (777)	\$ 150	\$ 150	\$ 927	\$ 927
5	Renewables	\$ (3,120)	\$ (3,120)	\$ (2,485)	\$ (2,485)	\$ 635	\$ 635
6	Total Reductions to Rate Base	\$ (19,390)	\$ (19,167)	\$ (72,814)	\$ (72,709)	\$ (53,424)	\$ (53,542)
Additions - Regulatory Assets							
7	Basis Reduction for Taking the ITC on Renewables	\$ 635	\$ 635	\$ 436	\$ 436	\$ (199)	\$ (199)
8	Net Additions and Reductions to Rate Base	\$ (18,755)	\$ (18,532)	\$ (72,378)	\$ (72,273)	\$ (53,623)	\$ (53,741)

Notes and Source

Amounts represent a decrease (increase) to the jurisdictional ADIT balance and (decrease) increase to rate base
Cols A&B: APS Schedule B-2
Cols C&D: APS Rebuttal Schedule B-2 and Workpaper EAB-WP01RB - RB PTYP Additions Update

Line No.	Description	Per Company		Per Staff		Staff Adjustment	
		Total Company (A)	ACC* (B)	Total Company (C)	ACC* (D)	Total Company (E)	ACC (F)
1	Four Corners SCR Deferral - Addition to Rate Base	\$ 44,120	\$ 43,908	\$ 43,550	\$ 43,550	\$ (570)	\$ (358)
2	Deferred Tax Liability	\$ (10,920)	\$ (10,867)	\$ (10,779)	\$ (10,779)	\$ 141	\$ 89
3	Net Adjustment to Rate Base	\$ 33,200	\$ 33,041	\$ 32,771	\$ 32,771	\$ (429)	\$ (269)

Notes and Source:

Cols. A&B: Company filing, Schedule B-2 pursuant to Attachment EAB-29DR
Cols. C&D: Company Rebuttal Attachment EAB-11RB and APS Rebuttal Schedule B-2

Line No.	Description	Per Company (A)	Per Staff (B)	Adjustment (C)
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Adjustment has now been incorporated in Schedule B-3 Revised

Notes and Source

Arizona Public Service Company
Prepaid Directors and Officers Liability Insurance

Docket No. E-01345A-19-0236
Schedule B-10
Page 1 of 1

Test Year Ended June 30, 2019
(Thousands of Dollars)

Line No.	Description	Per Company (A)	Per Staff (B)	Staff Adjustment (C)
1	Adjustment to Remove 50% of Prepaid Directors and Officers Liability Insurance - Total Company	\$ 307	\$ 153	\$ (153)
2	ACC Jurisdictional Factor			0.942356
3	Adjustment to Remove 50% of Prepaid Directors and Officers Liability Insurance - ACC Jurisdictional			\$ (145)

Notes and Source:

Col. A: Per Company response to Staff 5.43:

Line 2: ACC Jurisdictional Factor Calculation:

4	Allowance for Working Capital per APS Schedule B-1 - ACC Jurisdictional	\$ 352,129
5	Allowance for Working Capital per APS Schedule B-1 - Total Company	\$ 373,669
6	ACC Jurisdictional Factor	0.942356

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Schedule B-11
Page 1 of 1
Revised for Surrebuttal

Arizona Public Service Company
Costs for Damaged and Retired McMicken Battery Energy Storage Facility

Test Year Ended June 30, 2019
(Thousands of Dollars)

Line No.	Description	Staff Adjustment (A)
1	Accumulated Depreciation balance for McMicken BESF at 6/30/2020	\$ (1,041)
2	ACC Jursidictional Factor	1.000000
3	Adjustment to Remove Accumulated Depreciation balance for McMicken BESF at 6/30/2020 - ACC Jurisdictional	\$ (1,041)

Notes and Source:

Line 1: Company response to Staff 25.4(b)
Lines 2 and 3: APS Rebutal Schedule B-2, page 5 of 6, APS adjustment 15.

Arizona Public Service Company
Cash Working Capital

Docket No. E-01345A-19-0236
Schedule B-12
Page 1 of 3
Revised for Surrebuttal

Test Year Ended June 30, 2019
(Thousands of Dollars)

LINE NO.	DESCRIPTION	STAFF INCOME STATEMENT ADJUSTMENTS (A)	CWC FACTOR (B)	STAFF ADJUSTMENTS TO CASH WORKING CAPITAL (C)
1	FUEL FOR ELECTRIC GENERATION:			
2	COAL		0.01834	\$ -
3	NATURAL GAS		0.00021	\$ -
4	GAS MTM AND FUTURES		0.00000	\$ -
5	HANDLING		0.06700	\$ -
6	FUEL OIL		-0.01555	\$ -
7	NUCLEAR:			
8	AMORTIZATION		0.00000	\$ -
9	SPENT FUEL		0.00000	\$ -
10	TOTAL NUCLEAR FUEL	\$ -		\$ -
11				
12	TOTAL FUEL	\$ -		\$ -
13				
14	PURCHASED POWER	\$ 33,751	-0.00570	\$ (192)
15	POWER MTM/PSA		0.00000	\$ -
16	TRANSMISSION BY OTHERS		-0.01888	\$ -
17	TOTAL PURCHASED POWER & TRANSMISSION	\$ 33,751		\$ (192)
18				
19	ALLOWANCES		0.00000	\$ -
20				
21	TOTAL FUEL AND PURCHASED POWER	\$ 33,751		\$ (192)
22				
23	OTHER OPERATIONS & MAINTENANCE:			
24	PAYROLL		0.06700	\$ -
25	INCENTIVE	\$ (18,952)	-0.06878	\$ 1,304
26	STOCK COMPENSATION		0.00000	\$ -
27	SEVERANCE (EXCLUDES PENSION)		0.06070	\$ -
28	PENSION AND OPEB	\$ (12,853)	-0.05599	\$ 720
29	EMPLOYEE BENEFITS		0.07224	\$ -
30	PAYROLL TAXES		0.05937	\$ -
31	MATERIALS & SUPPLIES		0.03103	\$ -
32	VEHICLE LEASE PAYMENTS		0.07936	\$ -
33	PREPAID VEHICLE LICENSES		0.00000	\$ -
34	RENTS		0.00000	\$ -
35	PREPAID RENTS		0.00000	\$ -
36	PALO VERDE LEASE		0.00000	\$ -
37	PALO VERDE S/L GAIN AMORT		0.00000	\$ -
38	INSURANCE	\$ (174)	0.00000	\$ -
39	OTHER	\$ 16,471	0.00355	\$ 58
40	TOTAL	\$ (15,508)		\$ 2,082
41				
42	DEPRECIATION & AMORTIZATION		0.00000	\$ -
43	AMORT OF ELECTRIC PLT ACQ ADJ		0.00000	\$ -
44	AMORT OF PROP LOSSES & REG STUDY COSTS		0.00000	\$ -
45	TOTAL	\$ -		\$ -
46				
47	INCOME TAXES:			
48	CURRENT:			
49	FEDERAL	\$ (2,107)	-0.02439	\$ 51
50	STATE	\$ (384)	-0.02957	\$ 11
51	DEFERRED		0.00000	\$ -
52	TOTAL	\$ (2,492)		\$ 62
53				
54	OTHER TAXES:			
55	PROPERTY TAXES	\$ (6,556)	-0.46901	\$ 3,075
56	SALES TAXES		-0.06850	\$ -
57	FRANCHISE TAXES		-0.07832	\$ -
58	TOTAL	\$ (6,556)		\$ 3,075
59				
60	INTEREST EXPENSE - SYNCHRONIZED	\$ 491	-0.14334	\$ (70)
61				
62	TOTAL	\$ 9,686		\$ 4,957

Notes and Source

Col. B: Amounts from Company workpaper EAB-WP46DR IS

Test Year Ended June 30, 2019
(Thousands of Dollars)

Line No	Description	Federal Income Tax (A)	State Income Tax (B)	Total Income Tax (C)	Reference
I. Change in Current Income Taxes					
1	Income Tax Rate	21.00%		24.75%	Schedule A-1
2	Income Taxes at Present Rates		3.75%	\$ 11,129	Schedule C.1j, line 11
Adjustments to Income Tax Expense:					
3	Income Taxes at Present Rates	\$ 9,445	\$ 1,684	11,129	
4	Income Taxes at Proposed Rate	\$ (11,552)	\$ (2,069)	\$ (13,621)	Schedule A-1, Col.E
5	Income Taxes Expense Adjustment	\$ (2,107)	\$ (384)	\$ (2,492)	

Test Year Ended June 30, 2019
(Thousands of Dollars)

Line No	Description	Reference	Amount (A)	Amount (B)
II. Reconciliation of Non-Fuel O&M Expense Adjustments				
1	Total Staff O&M Non-Fuel Expense adjustments		\$	(15,508)
Specific to Selected Cash Working Capital Components:				
2	PAYROLL			
3	INCENTIVE	C-8 & C-9	\$ (18,952)	
4	STOCK COMPENSATION			
5	SEVERANCE (EXCLUDES PENSION)			
6	PENSION AND OPEB	C-17	\$ (12,853)	
7	EMPLOYEE BENEFITS			
8	PAYROLL TAXES			
9	MATERIALS & SUPPLIES			
10	VEHICLE LEASE PAYMENTS			
11	PREPAID VEHICLE LICENSES			
12	RENTS			
13	PREPAID RENTS			
14	PALO VERDE LEASE			
15	PALO VERDE S/L GAIN AMORT			
16	INSURANCE			
17	OTHER	C-2 & C-7	\$ (174)	
18	Subtotal	C-1, C-3, C-12, C-16, C-19 & C-21	\$ 16,471	
			\$ (15,508)	\$ (15,508)
19	Other		\$	-

Test Year Ended June 30, 2019
(Thousands of Dollars)

Line No.	Description	AzCC Jurisdictional Amounts			Difference: Staff Surrebuttal Adjustment (C) = B-A
		APS Original Applicaton (A)	APS Rebuttal (B)		
1	Gross Utility Plant in Service	\$ (13,767)	\$ (13,767)	\$	-
2	Accumulated Depreciation and Amortization	\$ 6,401	\$ 6,401	\$	-
3	Net Plant in Service	\$ (7,366)	\$ (7,366)	\$	-
4	Deductions	\$ 1,495	\$ 1,507	\$	12
5	Additions				
6	Total Rate Base	\$ (5,871)	\$ (5,859)	\$	12

Notes and Source:

Col.A: APS SFR Schedule B-2, Company pro forma adjustment 8

Col.B: APS Attachment EAB-24RB, Schedule B-2, Rebuttal, Company pro forma adjustment 8

Test Year Ended June 30, 2019
(Thousands of Dollars)

		<u>AzCC Jurisdictional Amounts</u>		<u>Difference:</u>	
				<u>Staff</u>	
<u>Line</u>	<u>Description</u>	<u>APS Original</u>	<u>APS Rebuttal</u>	<u>Surrebuttal</u>	<u>Adjustment</u>
<u>No.</u>		<u>(A)</u>	<u>(B)</u>		<u>(C) = B-A</u>
1	Gross Utility Plant in Service			\$ -	
2	Accumulated Depreciation and Amortization			\$ -	
3	Net Plant in Service	\$ -	\$ -	\$ -	
4	Deductions	\$ 544	\$ 2,551	\$ 2,007	
5	Additions	\$ (2,198)	\$ (10,308)	\$ (8,110)	
6	Total Rate Base	<u>\$ (1,654)</u>	<u>\$ (7,757)</u>	<u>\$ (6,103)</u>	

Notes and Source:

Col.A: APS SFR Schedule B-2, Company pro forma adjustment 9

Col.B: APS Attachment EAB-24RB, Schedule B-2, Rebuttal, Company pro forma adjustment 9

Arizona Public Service Company
Ocotillo Deferral
Test Year Ended June 30, 2019
(Thousands of Dollars)

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Schedule B-15
Page 1 of 1
Added for Surrebuttal

		AzCC Jurisdictional Amounts		Difference:	
Line No.	Description	APS Original Application (A)	APS Rebuttal (B)	Staff Surrebuttal Adjustment (C) = B-A	
1	Gross Utility Plant in Service			\$	-
2	Accumulated Depreciation and Amortization			\$	-
3	Net Plant in Service	\$ -	\$ -	\$	-
4	Deductions	\$ (20,297)	\$ (21,180)	\$	(883)
5	Additions	\$ 82,008	\$ 85,577	\$	3,569
6	Total Rate Base	\$ 61,711	\$ 64,397	\$	2,686

Notes and Source:
Col.A: APS SFR Schedule B-2, Company pro forma adjustment 11
Col.B: APS Attachment EAB-24RB, Schedule B-2, Rebuttal, Company pro forma adjustment 11

Test Year Ended June 30, 2019
(Thousands of Dollars)

Line No.	Description	AzCC Jurisdictional Amounts		
		APS Original Application (A)	APS Rebuttal (B)	Difference: Staff Surrebuttal Adjustment (C) = B-A
Original Cost:				
1	Gross Utility Plant in Service			\$ -
2	Accumulated Depreciation and Amortization			\$ -
3	Net Plant in Service	\$ -	\$ -	\$ -
4	Deductions	\$ 90,705	\$ 176,096	\$ 85,391
5	Additions			\$ -
6	Total Rate Base (Original Cost)	\$ 90,705	\$ 176,096	\$ 85,391

Notes and Source:

Col.A, Lines 1-6: APS SFR Schedule B-2, Company pro forma adjustment 13
Col.B, Lines 1-6: APS Attachment EAB-24RB, Schedule B-2, Rebuttal, Company pro forma adjustment 13
Note: The related RCND adjustment is included in the adjustment on Staff Schedule B-19

Line No.	Description	AzCC Jurisdictional Amounts		
		APS Original Applicaton (A)	APS Rebuttal (B)	Difference: Staff Surrebuttal Adjustment (C) = B-A
1	Gross Utility Plant in Service			\$ -
2	Accumulated Depreciation and Amortization			\$ -
3	Net Plant in Service	\$ -	\$ -	\$ -
4	Deductions			\$ -
5	Additions		\$ 6,556	\$ 6,556
6	Total Rate Base	\$ -	\$ 6,556	\$ 6,556

Notes and Source:

Col.A: APS SFR Schedule B-2

Col.B: APS Attachment EAB-24RB, Schedule B-2, Rebuttal, Company pro forma adjustment 14

Line No.	Description	APS Schedule B-2, Line Reference	AzCC Jurisdictional Amounts			Difference: Staff Surrebuttal Adjustment (C) = B-A
			APS Original Application (A)	APS Rebuttal (B)		
1	Gross Utility Plant in Service				\$ -	
2	Accumulated Depreciation and Amortization				\$ -	
3	Net Plant in Service		\$ -	\$ -	\$ -	
4	Operating Lease Liabilities	Line 13	\$ (99,614)	\$ (79,892)	\$ 19,722	
5	Operating Lease Right-of-Use Assets	Line 21	\$ 155,663	\$ 135,941	\$ (19,722)	
6	Total Rate Base		\$ 56,049	\$ 56,049	\$ -	

Notes and Source:

Col.A: APS SFR Schedule B-2

Col.B: APS Attachment EAB-24RB, Schedule B-2, Rebuttal, lines 13 and 21

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Schedule B-19
Page 1 of 1
Added for Surrebuttal

Arizona Public Service Company
APS RCND Differences

Test Year Ended June 30, 2019
(Thousands of Dollars)

AzCC Jurisdictional RCND Amounts										
Line No.	Description	APS Schedule B-2, Line Reference	APS Original Application (A)		APS Rebuttal (B)		Difference: Staff Surrebuttal RCND Adjustment (C) = B-A		Less: Staff OCRB Adjustment (D)	Difference: Staff Net Surrebuttal RCND Adjustment for APS Rebuttal RCND Updates (E) = C - D
RCND:										
1	Gross Utility Plant in Service	Line 1	\$ 34,340,989		\$ 33,918,278		\$ (422,711)		\$ (38,954)	\$ (383,757)
2	Accumulated Depreciation and Amortization	Line 2	<u>\$ (13,304,371)</u>		<u>\$ (13,152,825)</u>		<u>\$ 151,546</u>		<u>\$ 25,630</u>	<u>\$ 125,916</u>
3	Net Plant in Service		\$ 21,036,618		\$ 20,765,453		\$ (271,165)		\$ (13,324)	\$ (257,841)
4	Deferred Income Taxes	Line 4	\$ (3,648,164)		\$ (3,655,239)		\$ (7,075)		\$ (52,318)	\$ 45,242
5	Regulatory Liabilities	Line 14	<u>\$ (2,962,230)</u>		<u>\$ (2,700,572)</u>		<u>\$ 261,658</u>		<u>\$ 85,391</u>	<u>\$ 176,267</u>
6	Net Rate Base (RCND)		\$ 14,426,224		\$ 14,409,642		\$ (16,582)		\$ 19,749	\$ (36,331)

Notes and Source:

Col.A: APS SFR Schedule B-1, page 2, Col. F
Col.B, APS Attachment EAB-23RB, Schedule B-1, page 2, Rebuttal, Col. F
Col.D: Staff Schedule B, column B, Staff OCRB Adjustments for these line items

Test Year Ended June 30, 2019
(Thousands of Dollars)

Line No.	Description	Per APS (A)	Per Staff (B)	Staff Adjustment (C)
1	Adjustment to Remove Bain Costs	\$ 695	\$ -	\$ (695)
2	Jurisdictional Factor			0.914690
3	ACC Jurisdictional Adjustment to Remove Bain Consulting Costs			\$ (636)

Notes and Source

Col. A: Amount from the response to Staff 5.7 and Staff 15.7

Line 2: ACC Jurisdictional Factor Calculation:

4	Administrative and general per APS - ACC Jurisdictional per Schedule C-2	\$ (11,301)
5	Administrative and general per APS - Total Company per Schedule C-2	\$ (12,355)
6	ACC Jurisdictional Factor	0.914690

Arizona Public Service Company
Injuries and Damages
Docket No. E-01345A-19-0236
Schedule C-2
Page 1 of 1

Test Year Ended June 30, 2019
(Thousands of Dollars)

Line No.	Description	Amount
1	2016	\$ 8,736
2	2017	9,339
3	2018	11,083
4	2019	10,848
5	Four-Year Average	\$ 10,002
6	Test Year Ended June 30, 2019	\$ 9,798
7	Adjustment to Injuries and Damages (Total Company)	\$ 204
8	Jurisdictional Factor	0.914690
9	Adjustment to Injuries and Damages (ACC Jurisdictional)	\$ 187
Notes and Source:		
Lines 1-5: Company's response to Initial Data Request 1.50 and Staff 5.25		
Line 6: Company's response to Staff 15.10		
Line 7: Line 5 - Line 6		
Line 4: ACC Jurisdictional Factor Calculation:		
10	Administrative and general per APS - ACC Jurisdictional per Schedule C-2	\$ (11,301)
11	Administrative and general per APS - Total Company per Schedule C-2	\$ (12,355)
12	ACC Jurisdictional Factor	0.914690

Test Year Ended June 30, 2019

Line No.	Description	Per APS (A)	Per Staff (B)	Staff Adjustment (C)
1	UARG Membership Dues	\$ 194,959	\$ -	\$ (194,959)
2	USWAG Membership Dues	\$ 38,200	\$ -	\$ (38,200)
3	Adjustment to Remove UARG and USWAG Membership Dues	\$ 233,159	\$ -	\$ (233,159)
4	ACC Jurisdictional Factor			0.914690
5	Adjustment to Remove UARG and USWAG Membership Dues - ACC Jurisdictional			\$ (213,268)
6	Adjustment to Remove UARG and USWAG Membership Dues - ACC Jurisdictional (\$000s)			\$ (213)

Notes and Source

Col. A: Company response to Staff 15.8

Line 4: ACC Jurisdictional Factor Calculation:

7	Administrative and general per APS - ACC Jurisdictional per Schedule C-2	\$ (11,301)
8	Administrative and general per APS - Total Company per Schedule C-2	\$ (12,355)
9	ACC Jurisdictional Factor	0.914690

Line No.	Description	Per APS		Per Staff		Staff Adjustment (G)
		Post-Test Year Plant Amount (A)	Depreciation Rate (B)	Post-Test Year Plant Amount (D)	Depreciation Expense (F) = (D) x (E)	
1	Distribution	\$ 252,657	2.51%	\$ 211,825	\$ 5,317	\$ (1,025)
2	AMI Meters	\$ 25,588	6.20%	\$ 17,473	\$ 1,087	\$ (500)
3	Land	\$ 839	0.00%	\$ 8,036	\$ -	\$ -
4	Total Distribution	\$ 279,085		\$ 237,334	\$ 6,404	\$ (1,525)
5	General - Facilities	\$ 13,228	6.14%	\$ 69,504	\$ 4,268	\$ 3,455
6	Intangible - IT	\$ 178,123	10.00%	\$ 111,222	\$ 11,122	\$ (6,690)
7	Total General & Intangibles	\$ 191,350		\$ 180,726	\$ 15,390	\$ (3,235)
8	Nuclear Production	\$ 73,326	0.96%	\$ 67,708	\$ 210	\$ (494)
9	Renewables	\$ 24,364	3.80%	\$ 17,048	\$ 506	\$ (419)
10	Modern Grid	\$ -	5.00%	\$ -	\$ -	\$ -
11	Technology Innovation	\$ 25,446	10.00%	\$ 14,187	\$ 1,419	\$ (1,126)
12	Steam Production	\$ 122,746	5.02%	\$ 90,409	\$ 4,539	\$ (1,623)
13	Combined Cycle	\$ 11,751	4.44%	\$ 48,996	\$ 2,175	\$ 1,654
14	Combustion Turbine	\$ 45,167	3.66%	\$ 77,513	\$ 2,837	\$ 1,184
15	Total Fossil	\$ 179,664		\$ 216,918	\$ 9,551	\$ 1,214
16	Total PTYP Additions	\$ 773,236		\$ 733,921	\$ 33,479	\$ (5,584)
17	ACC Jurisdictional Factor					0.895748
18	Adjustment to Depreciation Expense Related to Post-Test Year Plant - ACC Jurisdictional					\$ (5,002)

Notes and Source
Cols. A & B: Elizabeth Blankenship's worksheet EAB-WP21DR
Cols D-F: Company Rebuttal Attachment EAB-02RB
Line 17: ACC Jurisdictional Factor:
19 Depreciation & amortization per Schedule C-1 - Total Company \$ 647,485
20 Depreciation & amortization per Schedule C-1 - ACC Jurisdictional \$ 722,843
21 ACC Jurisdictional Factor 0.895748

Test Year Ended June 30, 2019
(Thousands of Dollars)

Line No.	Description	Per APS (A)	Per Staff (B)	Staff Adjustment (C)
II. Property Taxes				
1	Post Test Year Fossil Generation Plant Additions	\$ 179,664	\$ 216,918	
2	Post Test Year Nuclear Generation Plant Additions	\$ 73,326	\$ 67,708	
3	Post Test Year Distribution and IT/Facilities Plant Additions	\$ 470,435	\$ 418,060	
4	Post Test Year Technology Innovation Plant Additions	\$ 25,446	\$ 14,187	
5	Post Test Year Renewables Plant Additions	\$ 24,364	\$ 17,048	
6	Total Plant Additions	<u>\$ 773,236</u>	<u>\$ 733,921</u>	
7	Full Cash Value Fossil Generation	\$ 60,858	\$ 73,246	
8	Full Cash Value Nuclear Generation	\$ 24,931	\$ 23,021	
9	Full Cash Value Distribution and IT/Facilities	\$ 457,159	\$ 407,163	
10	Full Cash Value Technology Innovation	\$ 24,174	\$ 13,478	
11	Full Cash Value Renewables	\$ 4,873	\$ 3,410	
12	Total Full Cash Value	<u>\$ 571,995</u>	<u>\$ 520,317</u>	
13	Assessment Ratio	18%	18%	
14	Assessed Value Fossil Generation	\$ 10,954	\$ 13,184	
15	Assessed Value Nuclear Generation	\$ 4,488	\$ 4,144	
16	Assessed Value Distribution and IT/Facilities	\$ 82,289	\$ 73,289	
17	Assessed Value Technology Innovation	\$ 4,351	\$ 2,426	
18	Assessed Value Renewables	\$ 877	\$ 614	
19	Total Assessed Value	<u>\$ 102,959</u>	<u>\$ 93,657</u>	
20	Property Tax Rate	11.04%	10.94%	
21	Property Tax Expense Adjustment	<u>\$ 11,368</u>	<u>\$ 10,244</u>	<u>\$ (1,124)</u>
22	ACC Jurisdictional Factor			0.831005
23	Property Tax Expense Adjustment - ACC Jurisdictional			<u>\$ (934)</u>
Notes and Source				
Col. A: Elizabeth Blankenship's worksheet EAB-WP21DR				
Col B: Company Rebuttal Worksheet EAB-WP02RB				
Line 22: Jurisdictional Factor Calculation				
24	Taxes other than income taxes per APS Schedule C-1 - ACC Jurisdictional	\$ 191,519		
25	Taxes other than income taxes per APS Schedule C-1 - Total Company	<u>\$ 230,467</u>		
26	ACC Jurisdictional Factor	<u>0.831005</u>		

Test Year Ended June 30, 2019
(Thousands of Dollars)

Line No.	Description	ACC		Depreciation Rate (B)	Depreciation Expense (C)
		Jurisdictional Staff Adjustment (A)			

Withdrawn

Notes and Source:

Test Year Ended June 30, 2019
(Thousands of Dollars)

Line No.	Description	Per Company		Per Staff		Staff Adjustment	
		Total Company (A)	ACC (B)	Total Company (C)	ACC (D)	Total Company (E)	ACC (F)
I	Adjustment to Remove 50% of Directors and Officers Liability Insurance	\$ 752	\$ 721	\$ 376	\$ 360	\$ (376)	\$ (360)

Notes and Source

Cols A and B: Company response to Staff 5.43

Test Year Ended June 30, 2019
(Thousands of Dollars)

Line No.	Description	Jurisdictional Expense Adjustment (A)
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1 Adjustment for Allowance for 50% of a Normalized Amount of Incentive Compensation Expense \$ (18,709) Line 20

Col. A: Amounts from Company filing, Attachment EAB-WP39DR and calculated below:

	FERC Account	2017	2018	TY 2019	3-Year Average
2	506	\$ 5,581	\$ 3,700	\$ 3,143	
3	519	\$ 1,077	\$ 715	\$ 702	
4	524	\$ 9,694	\$ 6,433	\$ 6,317	
5	549	\$ 2,538	\$ 2,428	\$ 2,150	
6	557	\$ 787	\$ 691	\$ 550	
7	566	\$ 2,550	\$ 1,979	\$ 1,658	
8	588	\$ 7,057	\$ 5,313	\$ 4,801	
9	903	\$ 2,475	\$ 2,630	\$ 2,186	
10	916	\$ 902	\$ 794	\$ 747	
11	920	\$ 17,412	\$ 16,041	\$ 14,639	
12	926	\$ 132	\$ 70	\$ 94	
13	928	\$ 865	\$ 349	\$ 350	
14	930.2	\$ 1,383	\$ 1,296	\$ 1,143	
15		\$ 52,453	\$ 42,439	\$ 38,480	
16	Participant A&G Credit (net APS A&G)	\$ (4,021)	\$ (3,741)	\$ (3,324)	
17	Net O&M Incentive Compensation Expense	\$ 48,432	\$ 38,698	\$ 35,156	\$ 40,762

	Operations	Maintenance	A&G	Total	Disallowance Percentage	Staff Adjustment
18	3-Year Average - Total Company	\$ 25,857	\$ 676	\$ 14,229	50%	\$ (20,381)
19	ACC Jurisdictional Factor*	0.917987	0.917990	0.917988		
20	3-Year Average - ACC Jurisdictional	\$ 23,736	\$ 621	\$ 13,062	50%	\$ (18,709)

* Jurisdictional factors derived from Company Schedule C-2, page 13, column 38

Test Year Ended June 30, 2019

(Thousands of Dollars)

Line No.	Description	ACC	
		Jurisdictional O&M Expense	Amount (A)
1	Adjustment to Remove Housing Allowance	\$	(56)
2	Adjustment to Remove Retention Bonuses	\$	(149)
3	Adjustment to Remove Financial Planning and Physicals	\$	(38)
4	Adjustment to Executive Compensation Charged to APS O&M Expense	\$	(242)

Col. A: Amounts from APS' response to Staff 27.1

Arizona Public Service Company
Interest Synchronization

Docket No. E-01345A-19-0236

Schedule C-10

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Test Year Ended June 30, 2019
(Thousands of Dollars)

Revised for Surrebuttal

Line No.	Description	ACC	Reference
		Jurisdictional Amount	
1	Adjusted rate base	\$ 8,899,362	Schedule B
2	Weighted cost of debt	1.86%	Schedule D
3	Synchronized interest deduction	\$ 165,528	Line 1 x Line 2
4	Synchronized interest deduction per APS' filing	\$ 165,037	See note below
5	Difference (decreased) increased interest deduction	\$ 491	Line 3 - Line 4
6	Combined federal and state income tax rates	24.75%	APS Sch. C-3
7	Increase (decrease) to income tax expense	\$ (121)	

Notes and Source

Line 4:

8	APS Adjusted Rate Base	\$ 8,872,984	Schedule B
9	APS Weighted Cost of Debt	1.86%	Schedule D
10	Synchronized interest deduction per APS	\$ 165,037	

Test Year Ended June 30, 2019
(Thousands of Dollars)

Line No.	Description	Total Company Amount (A)	ACC Jurisdictional Amount (B)	Reference
1	Adjustment to Base Fuel and Purchased Power	\$ 33,751	\$ 33,751	A

Notes and Source

A: Per APS Witness Snook Workpaper LRS_WP5DR and Company response to Staff 15.11 as shown below:

Adjusted Test Year Fuel and Purchased Power Costs (cents per kWh)

	Per APS (C)	Per Staff (D)	Adjustment (E)
2 Normalized Fuel and Purchased Power Costs	3.0168	3.1451	\$ 0.1283
3 Test Year Fuel and Purchased Power Costs	3.2112	3.2112	\$ -
4 Difference	(0.1944)	(0.0661)	\$ 0.1283

Adjusted Test Year Retail Sales (MWh)

5 Test Year Retail Sales (MWh)	26,430,150	26,430,150
6 Pro Forma Adjustment to Normalize Weather	(61,842)	(61,842)
7 Pro Forma Adjustment to Annualize 6/30/19 Customer Level	-	120,008
8 Adjusted Test Year Retail Sales	26,368,308	26,488,316

9 Pro Forma Adjustment to Fuel and Purchased Power Expense

\$ (51,260)	\$ (17,509)	\$ 33,751
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Col. C: APS Witness Snook Workpaper LRS_WP5DR

Col. D: Company response to Staff 15.11

Arizona Public Service Company
Interest on Customer Deposits

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Test Year Ended June 30, 2019
(Thousands of Dollars)

Line No.	Description	Per Company (A)	Per Staff (B)	Adjustment (C)
1	ACC Jursidictional Customer Deposits	\$ 81,423	\$ 81,423	
2	Treasury Rate	2.60%	1.56%	
3	Interest on Customer Deposits	<u>\$ 2,117</u>	<u>\$ 1,270</u>	<u>\$ (847)</u>

Notes and Source

Col. A: Company workpaper EAB-WP33DR

Col. B: Company response to Staff 6.1

Line No.	Description	Per Company		Per Staff		Staff Adjustment	
		Total Company (A)	ACC* (B)	Total Company (C)	ACC* (D)	Total Company (E)	ACC (F)
1	Four Corners SCR Deferral - Addition to Rate Base	\$ 8,259	\$ 8,220	\$ 8,147	\$ 8,147	\$ (112)	\$ (73)

Notes and Source:

Cols. A&B: Company filing, Schedule B-2 pursuant to Attachment EAB-29DR
Cols. C&D: Company Rebuttal Attachment EAB-12RB and Rebuttal Schedule C-2

Test Year Ended June 30, 2019

Line No.	Description	Plant Amount (A)	APS Proposed Depreciation Expense (B)	Derived APS Depreciation Rate (C) = (B) / (A)	Staff Proposed Depreciation Rate (D)	Staff Adjusted Depreciation Expense (E) = (A) x (D)	Staff Adjustment (F) = (E) - (B)
1	Steam Production	2,061,772,317	102,771,307	4.98%	4.93%	101,645,375	(1,125,931)
2	Nuclear Production	3,140,084,563	36,557,148	1.16%	1.00%	31,400,846	(5,156,302)
3	Other Production	3,306,950,574	132,010,074	3.99%	3.95%	130,624,548	(1,385,526)
4	Transmission	3,085,700,278	63,076,999	2.04%	1.97%	60,788,295	(2,288,704)
5	Distribution	6,564,383,031	162,766,935	2.48%	2.45%	160,827,384	(1,939,551)
6	General (Studied)	808,631,513	51,219,105	6.33%	6.13%	49,569,112	(1,649,993)
7	Intangible (Studied)	148,269,351	7,131,085	N/A	N/A	7,131,085	-
8	General/Intangible (Not Studied)	1,130,514,537	65,909,290	N/A	N/A	65,909,290	-
9	Total	\$ 20,246,306,164	\$ 621,441,943			\$ 607,895,936	\$ (13,546,008)
10	ACC Jurisdictional Factor						0.895748
11	Adjustment to Depreciation Expense - ACC Jurisdictional						\$ (12,133,813)
12	Adjustment to Depreciation Expense - ACC Jurisdictional (\$000s)						\$ (12,134)

Notes and Source:

Cols. A and B: Company workpaper EAB-WP34DR

Col. D: APS Depreciation Study - using SFAS 143 method for cost of removal/negative net salvage

Line 10: ACC Jurisdictional Factor:

13	Depreciation & amortization per Schedule C-1 - Total Company	\$ 647,485
14	Depreciation & amortization per Schedule C-1 - ACC Jurisdictional	\$ 722,843
15	ACC Jurisdictional Factor	0.895748

Arizona Public Service Company
Depreciation Expense - Summary of Company's Test Year Recorded Amounts and Adjustment for New Depreciation Rates and for Non-Studied Assets
Test Year Ended June 30, 2019

Docket No. E-01345A-19-0236
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Line No	Original Cost as of June 30, 2019	Actual Expense for TME June 30, 2019	June 2019 Orig. Cost Balance @ Study Rates	2019 Depreciation Study Assets	Non-Studies Assets	Pro Forma Adjustment (D + E) - B = F
1	A	B	C	D	E	F
2	Production					
3	Steam Production	2,056,003,921	75,550,763	102,769,172	-	27,218,409
4	Steam - Land & Land Rights	5,768,396	-	2,135	2,135	2,135
5	Steam Production - Excluded from Study	-	-	-	-	-
6	Steam - Navajo Coal Haul - (Note 1)	-	(554,107)	-	-	554,107
7	Steam - Cholla U2 Reg. Asset Amort. - (Note 2)	-	16,989,012	-	16,989,012	-
8	Steam - Saguaro Reg. Asset Amort.	-	2,936,533	-	2,936,533	-
9	Steam - Navajo Reg. Asset Amort.	-	10,136,593	-	10,136,593	-
10	Steam - Four Corners SCR Deferral - (Note 3)	-	(8,833,529)	-	-	8,833,529
11	Steam - Four Corners Deferral Amort.	-	8,076,582	-	8,076,582	-
12	Steam - Four Corners Acq. Adj. Amort.	-	10,873,443	-	10,873,443	-
13	Nuclear Production	2,999,593,475	26,512,332	28,851,765	28,851,765	2,339,432
14	Nuclear - Land	-	4,417,790	-	-	-
15	Nuclear - Leased Property Amortized	136,073,298	6,463,505	7,705,383	7,705,383	1,241,879
16	Nuclear - Decommissioning	-	2,149,100	-	2,149,100	-
17	Other Production (Gas & Oil)	2,433,637,631	70,692,584	98,916,363	98,916,363	28,223,779
18	Other Production - Ocotillo Deferral (Note 4)	-	(4,201,264)	-	-	4,201,264
19	Other Production - Land & Land Rights	4,097,001	-	-	-	-
20	Solar Units - Legacy	12,964,430	389,681	335,881	335,881	(53,799)
21	Solar Units - Roof Tops	100,431,468	3,402,802	4,490,561	4,490,561	1,087,760
22	AZ Sun Production	744,148,127	28,562,001	28,267,269	28,267,269	(294,732)
23	AZ Sun - Land	-	11,671,917	-	-	-
24	Total Production Depreciation	8,508,807,454	249,146,032	271,338,529	263,631,011	73,353,762
25	Transmission					
26	Transmission SCE 500 kV	73,899,658	1,059,880	1,059,880	-	1,059,880
27	Transmission SCE 500 kV - Land & Land Rights	6,067,909	331,016	62,635	62,635	(268,381)
28	Transmission - ACC	138,573,690	2,706,806	2,788,623	2,788,623	81,818
29	Transmission - FERC	2,661,111,475	51,628,269	52,869,640	52,869,640	1,241,371
30	Transmission - Mead-Phoenix CIAC	(19,000,000)	-	-	-	-
31	Transmission - Land & Land Rights	225,047,546	6,296,221	6,296,221	6,296,221	-
32	Total Transmission Depreciation	3,085,700,278	62,022,191	63,076,999	2,788,623	1,054,808
33	Distribution					
34	Distribution	6,163,043,697	128,634,454	142,164,990	142,164,990	13,550,536
35	Electronic Meters	17,880,285	985,929	1,060,301	1,060,301	74,372
36	AMS Meters	298,664,902	14,641,081	18,576,957	18,576,957	3,935,876
37	AG-1 Deferral Amortization	-	2,902,717	-	2,902,717	-
38	Distribution - Land & Land Rights	84,378,038	618,524	944,687	944,687	326,163
39	Distribution - Leased Property Amortized	-	416,109	-	-	-
40	Total Distribution Depreciation	6,564,383,031	147,782,705	162,766,935	161,822,248	17,886,947
41	General & Intangible (Studied)					
42	Structures and Improvements	265,748,293	7,066,311	7,361,228	7,361,228	294,917
43	Office Furniture & Equipment Amortized	68,964,429	3,121,251	3,448,221	3,448,221	326,970
44	Computer Equipment	242,640,059	30,823,885	29,626,351	29,626,351	(1,197,534)
45	Stores Equipment Amortized	609,634	30,465	30,482	30,482	16
46	Tools Amortized	43,987,193	1,892,530	2,199,360	2,199,360	306,830
47	Laboratory Equipment Amortized	817,256	41,655	40,863	40,863	(792)
48	Communication Equipment	300,243,161	14,259,280	14,231,526	14,231,526	(27,754)
49	Miscellaneous Equipment Amortized	33,890,839	1,130,755	1,412,160	1,412,160	281,405
50	Total General & Intangible (Studied)	956,900,864	58,366,131	58,350,190	58,350,190	(15,941)
51		19,115,791,627	617,317,059	655,532,653	486,592,072	123,004,562
52	General & Intangible (Not Studied)					
53	General - Land	23,002,492	-	-	-	-
54	Franchises	3,701,443	145,392	148,203	148,203	2,811
55	Intangible Amortization	871,868,273	63,990,224	62,119,981	62,119,981	(1,870,243)
56	Structures and Improvements - Leased Property	34,868,274	828,859	729,937	729,937	(98,922)
57	Transportation Equipment	35,745,690	2,881,340	2,690,636	2,690,636	(190,704)
58	Power Operated Equipment	9,920,465	231,897	220,533	220,533	(11,363)
59	Communication Equipment - Leased Property	268,516	-	-	-	-
60	Communication Equipment - SCE	-	-	-	-	-
61	ARO Assets	151,139,384	-	-	-	-
62	Clearing From 4030 - (Note 5)	-	(556,441)	-	(964,164)	(407,723)
63	Total General & Intangible (Not Studied)	1,130,514,537	67,521,271	65,909,290	64,945,126	(2,576,144)
64	Total	20,246,306,164	584,838,330	621,441,943	486,592,072	89,703,431 [A]

APS Notes:

- Note 1 -** Navajo Railroad depreciation expense reclassified to fuel inventory (Account 151). Navajo plant to shutdown, remove.
Note 2 - Cholla Unit 2 amortization expense pro forma is being reversed on IS proforma EAB-WP52DR. As such, no adjustment is made on this page.
Note 3 - Four Corners SCR amortization expense is being reversed on IS proforma EAB-WP26DR. As such, no adjustment is made on this page.
Note 4 - Ocotillo Modernization amortization expense is being reversed on IS proforma EAB-WP27DR. As such, no adjustment is made on this page.
Note 5 - This account includes vehicle allocation chargeback, EIS balance adjustment, and software amortization catch-up adjustment.

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Arizona Public Service Company
Company Derivation of Estimated Dismantlement Costs with Future Inflation Included in Company-Proposed Depreciation Rates
Steam Production and Solar

Inflation Rate: 2.00%

Unit	Owned MW Capacity	Cost per kW	Estimated Cost	Final Retirements	Distributed Cost	Year of Study	Inflation Rate	Year Spent	Trended Cost	Accrual Rate
A	B	C	D	E		F	G	H	I	J=I/E
Cholla										
1	116	95	\$ 11,033,863	\$ 125,706,070	\$ 8,502,691	2015	2.00%	2025	\$ 10,364,733	8.2%
3	271	95	\$ 25,777,386	\$ 349,722,509	\$ 19,864,046	2015	2.00%	2025	\$ 24,214,161	6.9%
C	387	95	\$ 36,811,249	\$ 616,959,210	\$ 36,811,249	2015	2.00%	2025	\$ 10,293,813	7.3%
			Allocated to Common:	\$ 8,444,512						
			Allocated to Units:	\$ 28,366,737						
Four Corners										
4-5	970	93	\$ 90,078,373	\$ 1,246,466,684		2015	2.00%	2038	\$ 142,044,521	11.4%
C	970	99	\$ 95,606,491	\$ 1,350,110,177		2015	2.00%	2038	\$ 8,717,285	8.4%
Solar Sites										
Chino Valley	19	185	\$ 3,515,000	\$ 80,008,552		2015	2.00%	2042	\$ 5,999,706	7.5%
Cotton Center	17	185	\$ 3,145,000	\$ 75,648,605		2015	2.00%	2041	\$ 5,262,900	7.0%
Desert Star	11	185	\$ 2,035,000	\$ 32,686,341		2015	2.00%	2045	\$ 3,686,121	11.3%
Foothills	35	185	\$ 6,475,000	\$ 128,874,975		2015	2.00%	2043	\$ 11,273,132	8.7%
Gila Bend	32	185	\$ 5,920,000	\$ 98,721,410		2015	2.00%	2044	\$ 10,513,001	10.6%
Hyder	16	185	\$ 2,960,000	\$ 115,743,074		2015	2.00%	2042	\$ 5,052,384	4.4%
Legacy			\$ 0	\$ 12,150,821		2015	2.00%	2037	\$ 0	0.0%
Luke AFB	11	185	\$ 2,035,000	\$ 27,166,489		2015	2.00%	2045	\$ 3,686,121	13.6%
Paloma	17	185	\$ 3,145,000	\$ 60,532,173		2015	2.00%	2041	\$ 5,262,900	8.7%
Red Rock	40	185	\$ 7,400,000	\$ 83,793,214		2015	2.00%	2046	\$ 13,672,157	16.3%
Roof Tops	198	232	\$ 46,030,000	\$ 801,307,883		2018	2.00%	2042	\$ 79,527,731	17.6%

Notes and Source:

APS witness White, Direct Testimony, Attachment REW-2DR, page 87, Statement G

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Inflation Rate:	0.00%
APS Used:	2.00%

Arizona Public Service Company
Accrual Rates for Estimated Dismantlement Cost Without Estimated Future Inflation
Steam Production and Solar

Unit	A	B	C	D	E	F	G	H	I	J=I/E	K	L=J-K
	Owned MW Capacity	Cost per kW	Estimated Cost	Final Retirements	Distributed Cost	Year of Study	Inflation Rate	Year Spent	Trended Cost	Accrual Rate	Compare APS	Difference
Cholla												
1	116	95	\$ 11,033,863	\$ 125,706,070	\$ 8,502,691	2015	0.00%	2025	\$ 8,502,691	6.8%	8.2%	-1.5%
3	271	95	25,777,386	349,722,509	19,864,046	2015	0.00%	2025	19,864,046	5.7%	6.9%	-1.2%
C	387	95	0	141,530,631	8,444,512	2015	0.00%	2025	8,444,512	6.0%	7.3%	-1.3%
					\$ 36,811,249				\$ 36,811,249	6.0%	7.3%	-1.3%
	Allocated to Common:		\$ 8,444,512									
	Allocated to Units:		\$ 28,366,737									
Four Corners												
4-5	970	93	\$ 90,078,373	\$ 1,246,466,684		2015	0.00%	2038	\$ 90,078,373	7.2%	11.4%	-4.2%
C			5,528,118	103,643,493		2015	0.00%	2038	5,528,118	5.3%	8.4%	-3.1%
	970	99	\$ 95,606,491	\$ 1,350,110,177					\$ 95,606,491	7.1%	11.2%	-4.1%
Solar Sites												
Chino Valley	19	185	\$ 3,515,000	\$ 80,008,552		2015	0.00%	2042	\$ 3,515,000	4.4%	7.5%	-3.1%
Cotton Center	17	185	3,145,000	75,648,605		2015	0.00%	2041	3,145,000	4.2%	7.0%	-2.8%
Desert Star	11	185	2,035,000	32,686,341		2015	0.00%	2045	2,035,000	6.2%	11.3%	-5.1%
Foothills	35	185	6,475,000	128,874,975		2015	0.00%	2043	6,475,000	5.0%	8.7%	-3.7%
Gila Bend	32	185	5,920,000	98,721,410		2015	0.00%	2044	5,920,000	6.0%	10.6%	-4.7%
Hyder	16	185	2,960,000	115,743,074		2015	0.00%	2042	2,960,000	2.6%	4.4%	-1.8%
Legacy			0	12,150,821		2015	0.00%	2037	0	0.0%	0.0%	0.0%
Luke AFB	11	185	2,035,000	27,166,489		2015	0.00%	2045	2,035,000	7.5%	13.6%	-6.1%
Paloma	17	185	3,145,000	60,532,173		2015	0.00%	2041	3,145,000	5.2%	8.7%	-3.5%
Red Rock	40	185	7,400,000	83,793,214		2015	0.00%	2046	7,400,000	8.8%	16.3%	-7.5%
Roof Tops			9,400,000	85,982,228		2018	0.00%	2042	9,400,000	10.9%	17.6%	-6.7%
	198	232	\$ 46,030,000	\$ 801,307,883					\$ 46,030,000	5.7%	9.9%	-4.2%

Notes and Source:

Cols. A-F, K: APS witness White, Direct Testimony, Attachment REW-2DR, page 87, Statement G

Docket No. E-01345A-19-0236
Schedule C-14.4
Page 1 of 1

Inflation Rate:	2.00%
APS Used:	2.00%

Arizona Public Service Company
Accrual Rates for Estimated Dismantlement Costs with Inflation Through the Test Year
Steam Production and Solar

Unit	Owned MW Capacity	Cost per kW	Estimated Cost	Final Retirements	Distributed Cost	Year of Study	Inflation Rate	Test Year June 30, 2019	APS Year Spent	Trended Cost	Accrual Rate J=I/E	Compare APS K	Difference L=J-K					
A	B	C	D	E	F	G	H-1	H	I	J=I/E	K	L=J-K						
Cholla																		
	1	116	95	\$	11,033,863	\$	125,706,070	\$	8,502,691	2015	2.00%	2019	2025	\$	9,112,908	7.2%	8.2%	-1.0%
	3	271	95		349,722,509		19,864,046		2015	2.00%	2019	2025	2025		21,289,640	6.1%	6.9%	-0.8%
	C			0	141,530,631		8,444,512		2015	2.00%	2019	2025	2025		9,050,554	6.4%	7.3%	-0.9%
	387	95	\$	36,811,249	\$	616,959,210	\$	36,811,249						\$	39,453,102	6.4%	7.3%	-0.9%
	Allocated to Common: 8,444,512																	
	Allocated to Units: 28,366,737																	
Four Corners																		
	4-5																	
	C	970	93	\$	90,078,373	\$	1,246,466,684		2015	2.00%	2019	2038	2038	\$	96,543,077	7.7%	11.4%	-3.7%
	970	99	\$	5,528,118		103,643,493		2015	2.00%	2019	2038	2038		\$	5,924,857	5.7%	8.4%	-2.7%
														\$	102,467,934	7.6%	11.2%	-3.6%
Solar Sites																		
	Chino Valley	19	185	\$	3,515,000	\$	80,008,552		2015	2.00%	2019	2042	2042	\$	3,767,263	4.7%	7.5%	-2.8%
	Cotton Center	17	185		3,145,000		75,648,605		2015	2.00%	2019	2041	2041		3,370,709	4.5%	7.0%	-2.5%
	Desert Star	11	185		2,035,000		32,686,341		2015	2.00%	2019	2045	2045		2,181,047	6.7%	11.3%	-4.6%
	Foothills	35	185		6,475,000		128,874,975		2015	2.00%	2019	2043	2043		6,939,695	5.4%	8.7%	-3.4%
	Gila Bend	32	185		5,920,000		98,721,410		2015	2.00%	2019	2044	2044		6,344,864	6.4%	10.6%	-4.2%
	Hyder	16	185		2,960,000		115,743,074		2015	2.00%	2019	2042	2042		3,172,432	2.7%	4.4%	-1.6%
	Legacy			0	12,150,821				2015	2.00%	2019	2037	2037		0	0.0%	0.0%	0.0%
	Luke AFB	11	185		2,035,000		27,166,489		2015	2.00%	2019	2045	2045		2,181,047	8.0%	13.6%	-5.5%
	Paloma	17	185		3,145,000		60,532,173		2015	2.00%	2019	2041	2041		3,370,709	5.6%	8.7%	-3.1%
	Red Rock	40	185		7,400,000		83,793,214		2015	2.00%	2019	2046	2046		7,931,080	9.5%	16.3%	-6.9%
	Roof Tops				9,400,000		85,982,228		2018	2.00%	2019	2042	2042		9,493,535	11.0%	17.6%	-6.5%
		198	\$	232	\$	46,030,000	\$	801,307,883	\$						\$	48,752,380	6.1%	9.9%

Notes and Source:

Cols. A-F, K: APS witness White, Direct Testimony, Attachment REW-2DR, page 87, Statement G

Docket No. E-01345A-19-0236
Schedule C-14A
Page 1 of 1
Added for Surrebuttal

Arizona Public Service Company
Depreciation Expense - Nuclear Excess Reserve Amortization
Test Year Ended June 30, 2019

Line No.	Description	Per Company's Original Filing (A)	Per Company's Rebuttal Filing (B)	Difference (C) = (B) - (A)
1	Adjustment to Depreciation Expense - Nuclear Production	\$ 28,851,765	\$ 9,577,391	\$ (19,274,374)
2	ACC Jurisdictional Factor			0.895748304
3	Adjustment to Depreciation Expense - ACC Jurisdictional			\$ (17,264,987)
4	Adjustment to Depreciation Expense - ACC Jurisdictional (\$000s)			\$ (17,265)

Notes and Source:

Col. A: Company Workpaper EAB-WP34DR
Col. B: Company Rebuttal Workpaper EAB_ WP206RB1
Col. C: Line 4: Schedule C-4

Docket No. E-01345A-19-0236
Schedule C-14B
Page 1 of 1
Added for Surrebuttal

Arizona Public Service Company
Depreciation Expense - 40 Year Life for AZ Sun
Test Year Ended June 30, 2019

Line No.	Description	Per Company's Original Filing (A)	Per Company's Rebuttal Filing (B)	Difference (C) = (B) - (A)
1	Adjustment to Depreciation Expense - AZ Sun Production	\$ 28,267,269	\$ 20,777,771	\$ (7,489,498)
2	ACC Jurisdictional Factor			0.895748304
3	Adjustment to Depreciation Expense - ACC Jurisdictional			\$ (6,708,705)
4	Adjustment to Depreciation Expense - ACC Jurisdictional (\$000s)			\$ (6,709)

Notes and Source:

Col. A: Company Workpaper EAB-WP34DR
Col. B: Company Rebuttal Workpaper EAB_ WP206RB1
Col. C: Line 4: Schedule C-4

Line No.	Description	Post-Test Year Plant Amount (A)	APS Proposed Depreciation Rate (B)	Depreciation Expense using APS Proposed Accrual Rate (C) = (A) x (B)	Staff Proposed Depreciation Rate (D)	Staff Adjusted Depreciation Expense on PTY Plant (E) = (A) x (D)	Staff Adjustment (F) = (E) - (C)
1	Distribution	\$ 211,825	2.51%	\$ 5,317	2.45%	\$ 5,190	\$ (127)
2	AMI Meters	\$ 17,473	6.22%	\$ 1,087	6.10%	\$ 1,066	\$ (21)
3	Land	\$ 8,036	0.00%	\$ -	0.00%	\$ -	\$ -
4	Total Distribution	\$ 237,334		\$ 6,404		\$ 6,256	\$ (148)
5	General - Facilities	\$ 69,504	6.14%	\$ 4,268	6.13%	\$ 4,261	\$ (7)
6	Intangible - IT	\$ 111,222	10.00%	\$ 11,122	10.00%	\$ 11,122	\$ -
7	Total General & Intangibles	\$ 180,726		\$ 15,390		\$ 15,383	\$ (7)
8	Nuclear Production	\$ 67,708	0.31%	\$ 210	0.32%	\$ 219	\$ 9
9	Renewables	\$ 17,048	2.97%	\$ 506	2.90%	\$ 494	\$ (12)
10	Modern Grid	\$ -	5.00%	\$ -	5.00%	\$ -	\$ -
11	Technology Innovation	\$ 14,187	10.00%	\$ 1,419	10.00%	\$ 1,419	\$ -
12	Steam Production	\$ 90,409	5.02%	\$ 4,539	4.93%	\$ 4,457	\$ (81)
13	Combined Cycle	\$ 48,996	4.44%	\$ 2,175	4.40%	\$ 2,156	\$ (20)
14	Combustion Turbine	\$ 77,513	3.66%	\$ 2,837	3.61%	\$ 2,798	\$ (39)
15	Total Fossil	\$ 216,918		\$ 9,551		\$ 9,411	\$ (140)
16	Total PTYP Additions	\$ 733,921		\$ 33,479		\$ 33,181	\$ (298)
17	ACC Jurisdictional Factor						0.895748
18	Adjustment to Depreciation Expense Related to Post-Test Year Plant - ACC Jurisdictional						\$ (267)

Notes and Source:

Cols A-C: Schedule C-4
Col. D: APS Depreciation Study
Col. D: Lines 8 and 9;

19	Nuclear Production	APS Original Accrual Rate	APS Original SFAS 143 Rate	APS Rebuttal Accrual Rate	Larkin Derived SFAS 143 Rate
20	Renewables	0.96%	1.00%	0.31%	0.32%
		3.85%	3.76%	2.97%	2.90%
21	Depreciation & amortization per Schedule C-1 - Total Company	\$ 647,485			
22	Depreciation & amortization per Schedule C-1 - ACC Jurisdictional	\$ 722,843			
23	ACC Jurisdictional Factor	0.895748			

Line 17: ACC Jurisdictional Factor:

Test Year Ended June 30, 2019
(Thousands of Dollars)

Line No.	Description	APS Total		Jurisdictional Factor	Staff Expense Adjustment
		Company Expense Amount		(B)	(C)
Expenses Related to the Damaged and Retired McMicken Battery Energy Storage Facility					
1	Depreciation Expense	\$ 261	1.000000	\$ (261)	
2	Property Tax Expense	\$ 43	1.000000	\$ (43)	
3	O&M Expense	\$ 659	1.000000	\$ (659)	
4	Adjustment to Remove Expenses Related to the McMicken BESF	\$ 963		\$ (963)	

Expenses Related to the Damaged and Retired McMicken Battery Energy Storage Facility

Notes and Source

Col. A: Company response to Staff 25.4(c), (d) and (f)

Col. B: ACC Jurisdictional Factor Calculation:

Line No.	Description	Total Company		ACC	
		Amount		Jurisdictional	
		(A)		(B)	
1	Adjustment to Normalize Pension and Post-Retirement Employee Benefit Expenses - per Company Original Filing	\$	11,251	\$	10,328
2	Adjustment to Normalize Pension and Post-Retirement Employee Benefit Expenses - per Company Rebuttal		(2,750)		(2,524)
3	Staff Adjustment	\$	(14,001)	\$	(12,853)

Notes and Source:

Line 1: Company Schedule C-2 and Workpaper EAB-WP36DR from original filing

Line 2: Company Rebuttal Schedule C-2 and Rebuttal Workpaper EAB-WP16RB

Arizona Public Service Company
Adjust for Test Year AG-X Revenue Recovered in the PSA
Test Year Ended June 30, 2019
(Thousands of Dollars)

Docket No. E-01345A-19-0236
Schedule C-18
Page 1 of 1
Added for Surrebuttal

Line No.	Description	Total	
		Company (A)	ACC Jurisdictional (B)
1	Adjustment for Test Year AG-X Revenue Recovered in the PSA	\$ 15,000	\$ 15,000

Notes and Source:

Company Rebuttal Schedule C-2 and Rebuttal Workpaper LRS-WP03RB

Line No.	Description	Total		ACC	
		Company	Jurisdictional	(A)	(B)
1	Adjustment to Correct Transmission Expense Error	\$ 17,576	\$ 17,576		

Notes and Source:

Company Rebuttal Workpaper LRS-05RB

Test Year Ended June 30, 2019
(Thousands of Dollars)

		AzCC Jurisdictional Amounts		Difference:	
		APS Original	APS Rebuttal	Staff	
Line	Description	Applicaton	(B)	Surrebuttal	Adjustment
No.		(A)			(C) = B-A
Operating Revenues					
1	Revenues From Base Rates			\$ -	-
2	Revenues From Surcharges			\$ -	-
3	Other Electric Revenues			\$ -	-
4	Total Operating Revenues	\$ -	\$ -	\$ -	-
Operating Expenses					
5	Fuel and Purchased Power			\$ -	-
6	Operations and Maintenance			\$ -	-
7	Depreciation and Amortization		\$ 656	\$ 656	
8	Income Taxes		\$ (162)	\$ (162)	
9	Taxes other than Income Taxes			\$ -	-
10	Total Operating Expenses	\$ -	\$ 494	\$ 494	
11	Net Operating Income	\$ -	\$ (494)	\$ (494)	

Notes and Source:

Col.A: APS SFR Schedule C-2

Col.B: APS Attachment EAB-26RB, Schedule C-2, Rebuttal, Company pro forma adjustment 53

Test Year Ended June 30, 2019
(Thousands of Dollars)

		AzCC Jurisdictional Amounts		Difference: Staff	
Line No.	Description	APS Original Application (A)	APS Rebuttal (B)	Surrebuttal Adjustment (C) = B-A	
Operating Revenues					
1	Revenues From Base Rates	\$ (1,250)		\$ 1,250	
2	Revenues From Surcharges			\$ -	
3	Other Electric Revenues			\$ -	
4	Total Operating Revenues	\$ (1,250)	\$ -	\$ 1,250	
Operating Expenses					
5	Fuel and Purchased Power			\$ -	
6	Operations and Maintenance		\$ 1,250	\$ 1,250	
7	Depreciation and Amortization			\$ -	
8	Income Taxes	\$ (309)	\$ (309)	\$ -	
9	Taxes other than Income Taxes			\$ -	
10	Total Operating Expenses	\$ (309)	\$ 941	\$ 1,250	
11	Net Operating Income	\$ (941)	\$ (941)	\$ -	

Notes and Source:

Col.A: APS SFR Schedule C-2, Company pro forma adjustment 14

Col.B: APS Attachment EAB-26RB, Schedule C-2, Rebuttal, Company pro forma adjustment 14

		AzCC Jurisdictional Amounts		Difference:	
				Staff	
Line No.	Description	APS Original Application (A)	APS Rebuttal (B)	Surrebuttal Adjustment (C) = B-A	
Operating Revenues					
1	Revenues From Base Rates			\$ -	
2	Revenues From Surcharges			\$ -	
3	Other Electric Revenues			\$ -	
4	Total Operating Revenues	\$ -	\$ -	\$ -	
Operating Expenses					
5	Fuel and Purchased Power			\$ -	
6	Operations and Maintenance			\$ -	
7	Depreciation and Amortization	\$ 9,201	\$ 9,507	\$ 306	
8	Income Taxes	\$ (2,277)	\$ (2,353)	\$ (76)	
9	Taxes other than Income Taxes			\$ -	
10	Total Operating Expenses	\$ 6,924	\$ 7,154	\$ 230	
11	Net Operating Income	\$ (6,924)	\$ (7,154)	\$ (230)	

Notes and Source:

Col.A: APS SFR Schedule C-2, Company pro forma adjustment 26

Col.B: APS Attachment EAB-26RB, Schedule C-2, Rebuttal, Company pro forma adjustment 26

Test Year Ended June 30, 2019
(Thousands of Dollars)

		AzCC Jurisdictional Amounts		Difference: Staff	
Line No.	Description	APS Original Applicaton (A)	APS Rebuttal (B)	Surrebuttal Adjustment (C) = B-A	
Operating Revenues					
1	Revenues From Base Rates			\$ -	
2	Revenues From Surcharges			\$ -	
3	Other Electric Revenues			\$ -	
4	Total Operating Revenues	\$ -	\$ -	\$ -	
Operating Expenses					
5	Fuel and Purchased Power			\$ -	
6	Operations and Maintenance			\$ -	
7	Depreciation and Amortization	\$ (327)	\$ (327)	\$ -	
8	Income Taxes	\$ 108	\$ 108	\$ -	
9	Taxes other than Income Taxes			\$ -	
10	Total Operating Expenses	\$ (219)	\$ (219)	\$ -	
11	Net Operating Income	\$ 219	\$ 219	\$ -	

Notes and Source:

Col.A: APS SFR Schedule C-2, Company pro forma adjustment 29

Col.B: APS Attachment EAB-26RB, Schedule C-2, Rebuttal, Company pro forma adjustment 29

Test Year Ended June 30, 2019
(Thousands of Dollars)

		AzCC Jurisdictional Amounts		Difference:	
				Staff	
Line No.	Description	APS Original Application (A)	APS Rebuttal (B)	Surrebuttal Adjustment (C) = B-A	
Operating Revenues					
1	Revenues From Base Rates			\$ -	
2	Revenues From Surcharges			\$ -	
3	Other Electric Revenues			\$ -	
4	Total Operating Revenues	\$ -	\$ -	\$ -	
Operating Expenses					
5	Fuel and Purchased Power			\$ -	
6	Operations and Maintenance			\$ -	
7	Depreciation and Amortization			\$ -	
8	Income Taxes	\$ (938)	\$ (567)	\$ 371	
9	Taxes other than Income Taxes	\$ 3,789	\$ 2,290	\$ (1,499)	
10	Total Operating Expenses	\$ 2,851	\$ 1,723	\$ (1,128)	
11	Net Operating Income	\$ (2,851)	\$ (1,723)	\$ 1,128	

Notes and Source:

Col.A: APS SFR Schedule C-2, Company pro forma adjustment 40

Col.B: APS Attachment EAB-26RB, Schedule C-2, Rebuttal, Company pro forma adjustment 40

Test Year Ended June 30, 2019
(Thousands of Dollars)

		AzCC Jurisdictional Amounts		Difference:	
				Staff	
Line No.	Description	APS Original Application (A)	APS Rebuttal (B)	Surrebuttal Adjustment (C) = B-A	
Operating Revenues					
1	Revenues From Base Rates			\$ -	
2	Revenues From Surcharges			\$ -	
3	Other Electric Revenues			\$ -	
4	Total Operating Revenues	\$ -	\$ -	\$ -	
Operating Expenses					
5	Fuel and Purchased Power			\$ -	
6	Operations and Maintenance			\$ -	
7	Depreciation and Amortization			\$ -	
8	Income Taxes	\$ 146	\$ 1,193	\$ 1,047	
9	Taxes other than Income Taxes	\$ (590)	\$ (4,671)	\$ (4,081)	
10	Total Operating Expenses	\$ (444)	\$ (3,478)	\$ (3,034)	
11	Net Operating Income	\$ 444	\$ 3,478	\$ 3,034	

Notes and Source:

Col.A: APS SFR Schedule C-2, Company pro forma adjustment 41

Col.B: APS Attachment EAB-26RB, Schedule C-2, Rebuttal, Company pro forma adjustment 41

Attachment RCS-10

Responses to Staff Set 31

ARIZONA CORPORATION COMMISSION STAFF'S
THIRTY FIRST SET OF DATA REQUESTS TO
ARIZONA PUBLIC SERVICE COMPANY REGARDING
THE APPLICATION TO APPROVE RATE SCHEDULES DESIGNED TO
DEVELOP A JUST AND REASONABLE RATE OF RETURN
DOCKET NO. E-01345A-19-0236
NOVEMBER 20, 2020

Staff 31.1: TEAM balancing account balances.

- a. For each month-end from December 31, 2019 through October 31, 2020, please provide the balances in each TEAM balancing account.
- b. Please identify APS's estimated/projected TEAM balancing account balances for month-ends November 30 and December 31, 2020.
- c. At some point are the TEAM balancing accounts expected to reach zero? If not, explain fully why not. If so, at what point does APS project that the TEAM balancing accounts will reach zero?
- d. Does APS have projections of monthly TEAM balancing account balances for any months in 2021? If so, please identify and provide them.

Response: a. Please see the table below which shows the actual monthly changes to the balancing account through September 2020, as well as an estimate of monthly changes through the end of 2020. Ending YTD balances for each month in 2020 can be obtained by adding the beginning balance as of December 31, 2019, plus the monthly change for each month in 2020. Please note that amounts in parentheses represent under-refunded amounts (Regulatory liabilities) whereas the positive amounts represent over-refunded amounts (Regulatory Assets).

[Please See Next Page]

ARIZONA CORPORATION COMMISSION STAFF'S
THIRTY FIRST SET OF DATA REQUESTS TO
ARIZONA PUBLIC SERVICE COMPANY REGARDING
THE APPLICATION TO APPROVE RATE SCHEDULES DESIGNED TO
DEVELOP A JUST AND REASONABLE RATE OF RETURN
DOCKET NO. E-01345A-19-0236
NOVEMBER 20, 2020

Response to
Staff 31.1
(continued):

Monthly Changes to the TEAM Balancing Account

	TEAM I	TEAM II	TEAM III	Total
Beginning Balance ¹	1,611,849	(881,323)	(6,136,679)	(5,406,153)
Jan-20	(188,457)	(400,797)	(145,282)	(734,535)
Feb-20	56,418	1,350,888	(207,977)	1,199,329
Mar-20	(521,826)	(70,810)	(151,706)	(744,343)
Apr-20	(620,305)	1,639,767	(335,403)	684,058
May-20	1,303,993	514,060	587,775	2,405,828
Jun-20	(251,907)	97,999	(60,406)	(214,315)
Jul-20	736,710	3,962	139,117	879,788
Aug-20	1,248,369	943	252,308	1,501,620
Sep-20	455,717	35,537	(484,054)	7,200
Actual Ending Balance as of Sept 30, 2020	3,830,561	2,290,226	(6,542,308)	(421,522)
Oct-20	345,368	189	(244,389)	101,168
Nov-20 ²	(335,831)	-	(421,105)	(756,936)
Dec-20 ²	(489,226)	-	(843,383)	(1,332,609)
Estimated Ending Balance at Dec 31, 2020	3,350,872	2,290,415 ³	(8,051,185)	(2,409,898)

¹ Team life to date balance prior to December 31, 2019

² Estimated using prior year actual billed and unbilled revenue compared to current year forecast for TEAM I, excluding TEAM II, used a factor of the October 2020 billed and unbilled as prior year the rate was not in effect.

³ The TEAM II bill credit is no longer active, therefore there are no additional billings to adjust the balancing account.

- b. Please see the table provided in part a above.
- c. No. The TEAM bill credit is based on kWh usage and therefore will vary based on such usage. The chances that actual usage will precisely equal the forecasted usage, even over a short period of time, is statistically zero. The balancing accounts are designed to accrue over-refunded and under-refunded TEAM bill credits based on forecasted versus actual kWh usage associated with the TEAM credits until such time that the effects of the Tax Cuts and Jobs Act are embedded in base rates, which will result from this rate case. Amounts contained in the balancing accounts will need to be addressed in either this rate case or another regulatory filing for the balancing accounts to reach zero.

Witness: Elizabeth Blankenship
Page 2 of 3

ARIZONA CORPORATION COMMISSION STAFF'S
THIRTY FIRST SET OF DATA REQUESTS TO
ARIZONA PUBLIC SERVICE COMPANY REGARDING
THE APPLICATION TO APPROVE RATE SCHEDULES DESIGNED TO
DEVELOP A JUST AND REASONABLE RATE OF RETURN
DOCKET NO. E-01345A-19-0236
NOVEMBER 20, 2020

Response to
Staff 31.1
(continued):

Note: The TEAM III bill credit is currently effective until December 31, 2020, however, on November 20, 2020 the Company made a 40-252 filing proposing to continue the bill credit into 2021. As part of this filing, the Company has proposed to refund \$6.976M of the estimated TEAM III balancing account to customers as part of the 2021 TEAM III bill credit.

- d. No, APS does not have projected 2021 TEAM balancing account amounts. As stated above, the balancing accounts will continue to accrue over-refunded and under-refunded credits based on forecasted versus actual kWh usage until current base rates are no longer in effect.

**ARIZONA CORPORATION COMMISSION STAFF'S
THIRTY FIRST SET OF DATA REQUESTS TO
ARIZONA PUBLIC SERVICE COMPANY REGARDING
THE APPLICATION TO APPROVE RATE SCHEDULES DESIGNED TO
DEVELOP A JUST AND REASONABLE RATE OF RETURN
DOCKET NO. E-01345A-19-0236
NOVEMBER 20, 2020**

Staff 31.2: TEAM balancing account. Refer to APS Rebuttal Schedule B-², page 5 of 6, adjustment 14, TEAM Balancing Accounts, which shows a new rate base addition of \$6.556 million and has a description that this is to include balancing accounts associated with TEAM I, II and a portion of TEAM III adjustment mechanisms as of 9/30/2020. Please respond to the following:

- a. Is the \$6.556 million rate base addition reflective of amounts as of a certain date, such as 9/30/2020? Explain.
- b. Have the balances in the TEAM balancing accounts fluctuated from month to month?
- c. Does APS expect that the balances in the TEAM balancing accounts will continue to fluctuate from month to month?
- d. If the TEAM balancing account balances are fluctuating on a monthly basis and are expected to reach zero, why should a rate base amount for the TEAM balancing accounts be based on amounts as of one particular date, such as 9/30/2020? Explain fully.
- e. Why do APS's proposed rate base adjustments 13 and 14, which are both related to the TEAM adjustor, use different dates? (APS adjustment 13 indicates that it reflects TEAM III amortization through 12/31/2020. APS adjustment 14 indicates that it is "as of 9/30/2020.") Explain fully.

Response: a. Yes, the \$6.556 million rate base addition is reflective of the total cumulative balance of the TEAM balancing accounts as of 9/30/2020, as that is the most recent date of actual financial information available at the time of the rebuttal testimony filing. See EAB-WP19RB for further detail and support.

	(Liability)/ Asset
Cumulative TEAM Balancing Accounts as of 9/30/2020 (see APS's response to Staff 31.1 a.)	(\$421,522)
Application of portion of TEAM III Balancing Account per 40-252 filing ¹	\$6,977,047
Net Remaining Cumulative TEAM Balancing Accounts	\$6,555,525

¹ The amount is slightly different from the amount reflected in the Company's Request to Amend Decision No. 77464 under A.R.S. §40-252 (\$6.976 million) due to rounding.

ARIZONA CORPORATION COMMISSION STAFF'S
THIRTY FIRST SET OF DATA REQUESTS TO
ARIZONA PUBLIC SERVICE COMPANY REGARDING
THE APPLICATION TO APPROVE RATE SCHEDULES DESIGNED TO
DEVELOP A JUST AND REASONABLE RATE OF RETURN
DOCKET NO. E-01345A-19-0236
NOVEMBER 20, 2020

Response to
Staff 31.2
(continued):

- b. Yes, the balances in the TEAM balancing accounts fluctuate from month to month as the rate is based on kWh customer usage.
- c. Yes, APS expects the TEAM balancing accounts to fluctuate monthly.
- d. We do not expect the TEAM balancing accounts to reach a zero balance as the rate is based on kWh customer usage. See response to Staff 31.1 for further information.
- e. Both rate base adjustment 13, Attachment EAB-17RB, and rate base adjustment 14, Attachment EAB-18RB, reflect the impacts of APS's proposal to extend TEAM III bill credits into 2021.

Rate base adjustment 13, Attachment EAB-17RB, which deals with the excess deferred income tax regulatory liability assumes TEAM III bill credits are extended through December 31, 2021. As such, it reflects the rate bases impacts of continued excess deferred tax amortization of protected excess deferred income taxes through that date. Should new base rates be expected to go into effect prior to December 31, 2021, this rate base adjustment can be updated to reflect only the applicable rate base impacts for amortization which occurs prior to new rates going into effect as the proceeding progresses.

Rate base adjustment 14, Attachment EAB-18RB, reflects the inclusion of the regulatory balancing accounts associated with TEAM I, II, and III adjustor mechanisms that have accumulated as of September 30, 2020, which was the most current balance sheet data available at the time of rebuttal filing. However, this amount was then adjusted to reflect the proposed refund of part of this balancing account as part of the Company's Request to Amend Decision No. 77464 under A.R.S. §40-252 (please see the Company's response to part a above). Should new base rates be expected to go into effect prior to December 31, 2021, this rate base adjustment can be updated to reflect only the applicable rate base impacts for refunds which occur prior to new rates going into effect as the proceeding progresses.

BEFORE THE ARIZONA CORPORATION COMMISSION

ROBERT "BOB" BURNS

Chairman

BOYD DUNN

Commissioner

SANDRA D. KENNEDY

Commissioner

JUSTIN OLSON

Commissioner

LEA MÁRQUEZ PETERSON

Commissioner

IN THE MATTER OF THE APPLICATION OF) DOCKET NO. E-01345A-19-0236
ARIZONA PUBLIC SERVICE COMPANY FOR A)
HEARING TO DETERMINE THE FAIR VALUE)
OF THE UTILITY PROPERTY OF THE COMPANY)
FOR RATEMAKING PURPOSES, TO FIX A JUST)
AND REASONABLE RATE OF RETURN)
THEREON, TO APPROVE RATE SCHEDULES)
DESIGNED TO DEVELOP SUCH RETURN.)

SURREBUTTAL

TESTIMONY

OF

DAVID C. PARCELL

ON BEHALF OF THE

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

DECEMBER 4, 2020

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EXECUTIVE SUMMARY
ARIZONA PUBLIC SERVICE COMPANY
DOCKET NO. E-01345A-19-0236

Mr. Parcell's Surrebuttal Testimony responds to the Rebuttal Testimony of Arizona Public Service Company ("APS") witness Ann E. Bulkley. Mr. Parcell's Surrebuttal Testimony addresses the following topics:

General Comments: Ms. Bulkley claims that APS has risks that exceed those of other electric utilities. Mr. Parcell demonstrates that APS is recognized as a below-risk electric utility by rating agencies and investment advisory services. He also demonstrates that Ms. Bulkley's proposed 10.0 percent Return on Equity ("ROE") for APS is well above the recent levels authorized for electric utilities throughout the U.S.

Discounted Cash Flow ("DCF") Issues: Ms. Bulkley continues to maintain that analysts' forecasts of Earnings Per Share ("EPS") growth are the only relevant factor in determining the growth component of the DCF model. Mr. Parcell shows that this is not correct and results in excessive DCF results.

Capital Asset Pricing Model ("CAPM") Issues: Ms. Bulkley maintains that forecast yields on U.S. Treasury ("Treasury") bonds should be used as the risk-free rate in the CAPM model. Mr. Parcell shows that forecasts of Treasury yields have consistently over-stated the actual yields, indicating that use of forecast yields over-states the CAPM results.

Comparable Earnings ("CE") Issues: Ms. Bulkley claims that Mr. Parcell should not have used historic ROEs in his CE analyses. Mr. Parcell notes that he used both historic and projected ROEs.

Risk Premium ("RP") Issues: Ms. Bulkley claims that Mr. Parcell's RP analyses ended in 2019 and implies these are outdated. Mr. Parcell notes that he used the same period she used in her RP analyses. In addition, he has updated his RP analyses to reflect 2020 information, with similar results.

Fair Value Rate of Return ("FVROR") Issues: Ms. Bulkley claims that Mr. Parcell's procedure for developing APS's FVROR is improper. Mr. Parcell shows that his FVROR is proper and uses the appropriate level of interest rates and forecasts in his analyses.

Update of Cost of Capital Analyses: I have updated my ROE analyses using information as of the end of October 2020, as opposed to the use of information as of the end of August 2020 in my Direct Testimony. Based upon this, I am maintaining my ROE recommendation at 9.40 percent.

INTRODUCTION

Q. Please state your name, occupation, and address.

A. My name is David C. Parcell. I am a Principal and Senior Economist of Technical Associates, Inc. My address is 2218 Worchester Road, Midlothian, Virginia 23113.

Q. Did you previously file Direct Testimony and an exhibit in this proceeding?

A. Yes. I filed Direct Testimony and one exhibit, identified as Exhibit No.____(DCP-1) on behalf of the Utilities Division Staff, with the Arizona Corporation Commission (“Commission”) on October 2, 2020.

Q. What is the purpose of your Surrebuttal testimony?

A. The purpose of this Surrebuttal Testimony is to respond to the Rebuttal Testimony of Arizona Public Service Company (“APS”) witness Ann E. Bulkley. Ms. Bulkley’s Rebuttal Testimony is generally focused on the following topics: Discounted Cash Flow (“DCF”) issues, Capital Asset Pricing Model (“CAPM”) issues, Comparable Earnings (“CE”) issues, Risk Premium model (“RP”) issues, and Fair Value Rate of Return (“FVROR”) issues. In addition, I have updated my return on equity (“ROE”) analyses to incorporate more recent data than was employed in my Direct Testimony.

Q. How is your Surrebuttal testimony organized?

A. My Surrebuttal Testimony follows the same order of subjects contained in Ms. Bulkley’s Rebuttal Testimony. My Surrebuttal Testimony, therefore, addresses the following general areas:

- General Comments
- Discounted Cash Flow Issues
- Capital Asset Pricing Model Issues
- Comparable Earnings Issues
- Risk Premium Method Issues

- Fair Value Rate of Return Issues
- Update of Return on Equity Analyses

Q. Have you prepared an exhibit in connection with this Surrebuttal Testimony?

A. Yes, I have prepared Exhibit No. (DCP-2), which updated several of the schedules prepared in connection with my Direct Testimony – Exhibit No. (DCP-1).

GENERAL COMMENTS

Q. Do you have any general comments about Ms. Bulkley's Rebuttal Testimony and recommendation in this proceeding?

A. Yes, I do. Ms. Bulkley's Rebuttal Testimony and her updated ROE analyses continue to reflect an inflated estimate of the current cost of capital and substantially over-estimate the required ROE for APS. This is true even though she has apparently recognized the fact that the costs of capital for utilities such as APS has declined, as she is reducing her ROE recommendation from the 10.15 percent level in her Direct Testimony to 10.0 percent in her updates contained in her Rebuttal Testimony.¹ Even the reduced 10.0 percent recommendation she now recommends is excessive in relation to current levels of capital costs and especially to low-risk utilities such as APS.

Q. Ms. Bulkley maintains that your 9.4 percent ROE recommendation is "unduly low in light of current and projected economic and capital market conditions."² It this correct?

A. No, it is not. In fact, Ms. Bulkley's own exhibits demonstrate that this is not the case. Her Attachment AEB-6RB indicates that, since the second half of 2014 (a period of over six years), the average quarterly authorized ROEs for electric utilities in the United States has

¹ Bulkley Rebuttal Testimony at 15:20-21.

² Id. at 35:9-10.

1 never been over 10.0 percent and has only been as high as 10.0 percent in one quarter (third
2 quarter of 2017). Clearly it is Ms. Bulkley who is “out of tune” with the cost of capital for
3 electric utilities throughout the U.S., as demonstrated by the fact that regulatory
4 commissions throughout the country have determined that the fair ROE is much less than
5 10.0 percent.

6
7 **Q. Ms. Bulkley cites your 9.40 percent ROE recommendation as being “60 basis points**
8 **lower than the Company currently authorized ROE of 10.00 percent.”³ Do you have**
9 **any response to this assertion?**

10 A. Yes, I do. Ms. Bulkley is referring to APS’s last general rate proceeding (Docket No. E-
11 01345A-16-0036), where a 10.0 percent ROE was part of a settlement in that proceeding.
12 What Ms. Bulkley does not indicate is that, in that proceeding, APS requested a ROE of
13 10.50 percent. As a result, the 10.0 percent authorized ROE she is referring to is 50 basis
14 points less than the Company requested in that proceeding. This is not significantly
15 different from the 60 basis points my recommendation is below the 10.0 percent ROE that
16 APS is requesting in this proceeding.

17
18 **Q. Ms. Bulkley claims that “it is not clear whether Mr. Parcell has considered the full**
19 **extent of APS’s operating risks, particularly those related to its generation portfolio.”⁴**
20 **What is your response to this assertion?**

21 A. Ms. Bulkley is incorrect. In my Direct Testimony, I demonstrated in multiple places where
22 independent and well-recognized financial entities (i.e., rating agencies and Value Line)
23 have given APS ratings/rankings that are superior to electric utilities in general.⁵ These
24 ratings/rankings consider all of the relevant “risks” of APS, including its generation

³ Id. at 35:3-4, 36:10-13.

⁴ Id. at 35:20-22.

⁵ Parcell Direct Testimony at 17:13-18, 18:1-7, 21:2-10, 23: 20-23.

1 portfolio. In addition, not with standing to Ms. Bulkley's assertion to the contrary⁶ any
2 impact of an electric utility, including APS, being "vertically integrated" vs. "electric
3 distribution" is also reflected in the respective ratings/rankings. APS's superior
4 ratings/rankings already reflect all of the relevant risk factors that go into determining its
5 respective ratings/rankings, including its nuclear generation portfolio and its status as a
6 vertically integrated electric utility.

7
8 **Q. Please describe the relative ratings/rankings of APS to which you are referring.**

9 A. As is shown on Exhibit No.____(DCP-2), Schedule 6, APS has bond ratings of A2/A- by
10 Moody's/Standard & Poor's. This schedule also indicates that APS's ratings are superior
11 to all of the companies contained in my proxy group and Ms. Bulkley's group of proxy
12 companies. In addition, Pinnacle West, parent company for APS, has a Value Line Safety
13 rating of "1", which is the highest (i.e., lowest risk) assigned. As I indicated in my Direct
14 Testimony, security ratings should reflect all relevant information that impact the ratings,
15 including "regulatory framework" and "ability to recover costs."⁷

16 Schedule 6 also indicates that none of my group of proxy companies has a Safety of "1" and
17 only two of Ms. Bulkley's proxy companies have a Safety of "1". Two of Ms. Bulkley's
18 proxy companies have a Safety of "3", which is two notches below that of Pinnacle West.

19
20 I also note that APS's common equity ratio of 55 percent is generally higher than that of
21 both the two proxy groups (Schedule 6) and is substantially higher than the average equity
22 ratio authorized in electric utility proceedings throughout the U.S. in recent years.⁸ Ms.
23 Bulkley also does not cite this in her "risk assessment" of APS.

24
⁶ Bulkley Rebuttal Testimony at 36: 18-20.

⁷ Parcell Direct Testimony at 18:9-23.

⁸ Id. at 21:14-17.

DISCOUNTED CASH FLOW (“DCF”) ISSUES

Q. Ms. Bulkley claims, in defense of her exclusive reliance on Earnings Per Share (“EPS”) forecasts as the growth component of her DCF analyses, that she considers “the full range of DCF results that may be considered by investors.”⁹ Is she correct in this assertion?

A. No, she is not correct. She has not incorporated anything into her DCF results except analysts forecasts of EPS growth. The claim that she categorized three sources of EPS growth estimates into “lowest, mean and highest” growth rates¹⁰ does not change the fact that all of these consider a single indicator of growth. In addition, the use of the “lowest” and “mean” EPS forecasts in her analyses produce DCF results of 9.20 percent or lower¹¹ which is well below her ROE recommendation of 10.0 percent and even below the 9.75 percent low end of her ROE range. Contrary to her assertions¹² there is nothing “disingenuous” about my demonstration that she has only considered one growth rate in her DCF analysis and only the “highest” version of this growth rate can be used to support her ROE recommendations in this proceeding.

In addition, her claim that “it is important to consider all expectations, the low, high and mean result” and then only rely on the “high” result, implies that all investors focus only on the most optimistic estimate of EPS growth in making investment decisions. This is a very narrow interpretation of investor behavior and is not supported by the actual experience of financial markets. If Ms. Bulkley was correct in her interpretation of the financial markets, every investor would just focus on the most optimistic estimate of EPS forecasts they could obtain to the exclusion of all other relevant information. This is simply not the case in the “real world” as is demonstrated by the abundance of financial information contained in

⁹ Bulkley Rebuttal Testimony at 39:11-13.

¹⁰ Id. at 39:9-11.

¹¹ Id. at 19:Figure 3.

¹² Id. at 39:12-13.

1 individual companies' annual reports (Form 10-Ks), prospectuses, and financial
2 presentations.

3
4 **Q. In defense of her exclusive use of EPS forecasts as the growth component in her DCF**
5 **model, Ms. Bulkley states “dividend growth can only be sustained by earnings**
6 **growth.”¹³ Does this statement justify her claim that only EPS growth is considered**
7 **by investors in making investment decisions?**

8 A. No, it does not. As I indicated in my Direct Testimony, investors have access to a wide
9 array of information to assist them in making investment decisions. EPS projections are
10 only one of the sources of growth that investors consider.¹⁴ Value Line, for example (i.e.,
11 one of Ms. Bulkley's sources of EPS growth projections) provides many sources of financial
12 information (both historic and projected) for its subscribers. To focus on only one financial
13 statistic (i.e., EPS growth), and indeed only focus on the estimated version of this statistic,
14 paints a very narrow and unproven interpretation of the functioning of the financial markets.

15
16 **Q. Ms. Bulkley claims that, since your ultimate Rate of Return (“ROR”) recommendation**
17 **includes only the top end of your DCF analysis range, it is “based on (her) proxy group**
18 **and prospective EPS growth rates” and therefore you are being “disingenuous.”¹⁵ Is**
19 **she correct in her assertion?**

20 A. No, she is not correct. As I clearly state in my Direct Testimony, I have considered five
21 indicators of growth in my DCF analyses.¹⁶ My ultimate adoption of the top end of the
22 range was not determined because it reflected the DCF results for Ms. Bulkley's proxy
23 group and prospective EPS growth rates, but rather due to my “recognition that these results
24 are relatively lower than historic DCF results” and that my “recommendation should be

¹³ Id. at 40:8-9.

¹⁴ Parcell Direct Testimony at 29-31.

¹⁵ Bulkley Rebuttal Testimony at 40:20-23.

¹⁶ Parcell Direct Testimony at 26:1-23.

1 considered conservative.”¹⁷ There is nothing “disingenuous” about this, notwithstanding
2 Ms. Bulkley’s incorrect claim.

3
4 **Q. Ms. Bulkley also claims that your Direct Testimony “relies on studies that are nearly**
5 **a decade old” where you criticize her exclusive use of EPS forecasts.¹⁸ What is your**
6 **response to this?**

7 A. Ms. Bulkley’s intended criticism of me is also a criticism of her own testimonies. Without
8 citing the detailed source of each study, she “relied” on in her Direct and Rebuttal
9 Testimonies, Ms. Bulkley cited the following footnotes (and dates of sources) in her
10 respective testimonies:

11 Direct Testimony

12 FN #31 (2000)
13 FN #32 (1994)
14 FN #50 (1998 & 1986)
15 FN #86 (2008)
16 FN #70 (2000)

17 Rebuttal Testimony

18 FN #54 (2010)
19 FN #57 (2006)
20 FN #58 (2003)
21 FN #166 (2006)
22

23 It is apparent that Ms. Bulkley relies on “studies” that are “more than a decade old.”
24

¹⁷ Id. at 28:1-4.

¹⁸ Bulkley Rebuttal Testimony at 6:4-11.

1 **Q. Ms. Bulkley maintains that the Federal Energy Regulatory Commission's ("FERC")**
2 **use of EPS forecasts in its preferred DCF model endorses her exclusive use of this in**
3 **her DCF model.¹⁹ What is your response to this assertion?**

4 A. Ms. Bulkley is misrepresenting what the FERC does in its DCF model. FERC uses a "two-
5 stage" DCF model with the "short-term" stage being represented by EPS forecasts, and the
6 "long-term" stage being represented by the forecasted growth in Gross Domestic Product
7 ("GDP").²⁰ Thus, EPS forecasts are not the only source of growth used in the "FERC DCF"
8 model. In addition, the "FERC DCF" model does not take the "high" EPS forecasts as the
9 short-term growth component.

10
11 **Q. Ms. Bulkley disagrees with your consideration of the retention growth as one of your**
12 **growth indicators in your DCF analyses.²¹ What is your response to this?**

13 A. I disagree with Ms. Bulkley's claim that retention growth is not a proper factor in estimating
14 the growth rate in a DCF context. Retention growth has long been recognized as a viable
15 source of estimates for the growth rate in a DCF context.

16
17 **CAPITAL ASSET PRICING MODEL ("CAPM") ISSUES**

18 **Q. Ms. Bulkley maintains that your CAPM analysis should have used forecasted yields**
19 **on U.S. Treasury Bonds rather than the current yields you used. What is your**
20 **response to her assertion?**

21 A. I disagree with Ms. Bulkley. It is proper to use the current yield as the risk-free rate in a
22 CAPM context, because the current yield is known and measurable and reflects investors'
23 collective assessment of all capital market conditions. Prospective interest rates, in contrast,
24 are not measurable and not achievable. For example, if the current yield on 20-year U.S.

¹⁹ Bulkley Rebuttal Testimony at 42:3-18.

²⁰ FERC Opinion No. 569, at para. 157.

²¹ Bulkley Rebuttal Testimony at 42-44.

Treasury Bonds is less than 2.0 percent, this reflects the rate that investors can receive on their investment. Investors cannot receive a prospective yield on their investments since such a yield is not actual but rather speculative.

Use of the current yield in a DCF context is similar to using the current risk-free rate in a CAPM context. Analysts do not use prospective stock prices as the basis for the dividend yield in a DCF analysis, as use of prospective stock prices is speculative. Use of current stock prices is appropriate, as this is consistent with the efficient market hypothesis. Likewise, current levels of interest rates reflect all current information (i.e., the efficient market hypothesis) and should be used as the risk-free rate in the CAPM.

Q. Do you have any additional comments regarding Ms. Bulkley's claims that projected interest rates should be used as the risk-free rate in a CAPM context?

A. Yes, I do. Ms. Bulkley claims that it is proper to use interest rate forecasts from "Blue Chip".²² However, it is apparent that, had she proposed such a use of projected rates in prior cases, she would have been incorrect. The table below shows the historic projection of 30-Year U.S. Treasury bonds by Blue Chip, as well as the actual yields.

Date of Blue Chip ²³	Forecast Period	Forecast 30-Year T Bonds	Actual 30-Year T Bonds Yield
Nov. 1, 2009	1 Q 2011	5.0%	4.56%
Nov. 1, 2010	1 Q 2012	4.5%	3.14%
Nov. 1, 2011	1 Q 2013	3.8%	3.28%
Nov. 1, 2012	1 Q 2014	3.4%	3.68%
Nov. 1, 2013	1 Q 2015	4.2%	2.55%
Nov. 1, 2014	1 Q 2016	4.1%	2.72%
Nov. 1, 2015	1 Q 2017	3.8%	3.04%
Nov. 1, 2016	1 Q 2018	3.1%	3.03%
Nov. 1, 2017	1 Q 2019	3.6%	3.01%

²² Bulkley Rebuttal Testimony, Attachment AEB-5.5RB.

²³ I have not compared the Blue Chip forecasts with the 1 Q 2020 since this ending period was impacted by the COVID-19 pandemic and its influence on the financial markets.

1 This indicates that in 8 of the last 9 years, forecasts of 30-Year U.S. Treasury bond exceeded
2 the actual levels. In some years, the differential was substantial (e.g., 2010, 2013, 2014,
3 2015 and 2017). As a result, any witness or Commission who relied upon forecasted interest
4 rates would have over-estimated the ROE.

5
6 **COMPARABLE EARNINGS (“CE”) ISSUES**

7 **Q. Ms. Bulkley criticizes your CE analyses because you consider historic ROEs.²⁴ Is her**
8 **criticism warranted?**

9 A. No, it is not. One of the most important considerations of most public utility rate
10 proceedings, including this proceeding, is the respective commissions’ determination of the
11 ROE for the subject utility. I note that Ms. Bulkley’s criticisms of my CE analyses do not
12 acknowledge that fact that I consider both historic and prospective ROEs.²⁵ I also note that
13 Ms. Bulkley does not acknowledge the fact that historic and prospective ROEs for my proxy
14 group are similar.²⁶

15
16 **RISK PREMIUM METHOD (“RP”) ISSUES**

17 **Q. Ms. Bulkley criticizes your RP analyses due to her perception that your analyses “ends**
18 **in 2019, and therefore does not consider the current and recent markets conditions in**
19 **the estimate of the risk premium.”²⁷ What is your response to this assertion?**

20 A. Ms. Bulkley’s description of my RP is only partially accurate. It is true that my development
21 of the risk premium ended in mid-2019.²⁸ What she does not acknowledge is that I used the
22 same time period in my risk premium development that she used in her Direct Testimony.²⁹
23 Where Ms. Bulkley is not correct is her implication that I did not use “current and recent”

²⁴ Id. at 49-50.

²⁵ Parcell Direct Testimony at 36:25-26, 37:1-15, 37:17-26, 38:6-15, 39:14-22.

²⁶ Id. at 38:6-16.

²⁷ Bulkley Rebuttal Testimony at 6:13-18.

²⁸ Parcell Direct Testimony, Exhibit No. ____ (DCP-1), Schedule 13.

²⁹ Id.

1 economic conditions in the development of my RP ROE estimate. It is clear from my Direct
2 Testimony that I used “current” (June – August 2020) and “recent” (November 2019 –
3 January 2020) levels of A-rated utility bond yields in deriving my RP ROE estimate.³⁰

4
5 As I indicate in a later section of my Surrebuttal Testimony, I have updated my risk premium
6 component through the third quarter of 2020, again the same period used by Ms. Bulkley in
7 her Surrebuttal Testimony.³¹ I note that, in developing the risk premium component of the
8 RP analysis, I do not give full weight to the 2020 differentials between authorized ROEs
9 and yields on A-rated public utility bonds, since the latter is substantially impacted by the
10 Federal Reserve policies combatting the financial impacts of the COVID-19 pandemic. I
11 observe that this conclusion also appears to be consistent with that of Ms. Bulkley, where
12 she indicated her belief that the “recent decline in Treasury bond yields is not representative
13 of the longer-term trend in government and corporate bond yields”.³² She also notes that
14 the Federal Reserve’s current policies include programs to “purchase government bonds and
15 corporate bonds from banks.”³³

16 17 **FAIR VALUE RATE OF RETURN (“FVROR”) ISSUES**

18 **Q. Ms. Bulkley criticizes your FVROR analyses and claims you should have used a**
19 **“longer term” estimate of U.S. Treasury bond yields. What is your response to this**
20 **assertion?**

21 **A.** As is apparent from my Direct Testimony, I use both historic and prospective values of
22 inflation and interest rates in developing my value of the risk-free rate of return. My
23 ultimate use of a 2.6 percent nominal “risk free rate” is actually the level of long-term U.S.

³⁰ Parcell Direct Testimony at 43:20-22, 44: 1-9.

³¹ Bulkley Rebuttal Testimony, Attachment AEB-6RB.

³² Id. at 20:20-23.

³³ Id. at 24:13-14.

1 Treasury yields prior to when the COVID-19 pandemic began.³⁴ As such, I have already
2 chosen the highest of recent and near-term estimates of the risk-free rate, which is favorable
3 to the position of APS.

4
5 Ms. Bulkley's proposal to use a longer-term estimate of U.S. Treasury bonds (3.4 percent)
6 reflects a yield that is more than double that of current Treasury bond yields (1.5 percent).
7 This is very speculative and, given the recent relationship between U.S. Treasury bond
8 projections and actual rates, is problematic.

9
10 **UPDATE OF RETURN ON EQUITY ("ROE") ANALYSES**

11 **Q. Have you updated the ROE analyses that you performed in your Direct Testimony?**

12 A. Yes, I have. In my Direct Testimony, my ROE analyses employed financial information
13 ending in August of 2020. For example, my DCF analyses used stock price data for the
14 three-month period June to August 2020, Value Line information through August of 2020
15 and EPS growth forecasts as of the end of August 2020. My CAPM analyses used risk-free
16 rate information (i.e., yield on 20-year U. S. Treasury bonds) for the three-month period
17 June-August 2020 and Value Line information through the end of August 2020. My CE
18 analyses used Value Line information through the end of August 2020. Finally, my RP
19 analyses used yields on A-rated utility bonds for the period June-August 2020.

20
21 I have updated each of the schedules in my Exhibit No. ____ (DCP-1) that can be updated, in
22 Exhibit No. ____ (DCP-2). This exhibit incorporates information from the same sources as
23 that contained in Exhibit No. ____ (DCP-1) and uses information for the three-month period
24 (as described above) August-October. Any schedule in Exhibit No. ____ (DCP-2) that

³⁴ Parcell Direct Testimony at 52:5-16.

1 incorporates updated information is also identified in the schedule numbering system (i.e.,
2 Schedule ____) with the additional label "Updated."

3
4 In addition to the updated financial information I considered, I also modified my proxy
5 group by eliminating Portland General Electric, which no longer satisfies one of my
6 selection criteria (i.e., Value Line Safety Rank of 1 or 2). Portland General Electric now
7 has a Safety Rank of 3, which falls outside my selection criteria. I also eliminated the four
8 companies in Ms. Bulkley's proxy group that she removed from her proxy group in her
9 updates.³⁵ These are DTE Energy, FirstEnergy, PPL Corp and Southern Co.

10
11 **Q. What are the results of your updates?**

12 A. Schedule 14 of Exhibit No.__(DCP-2) compares the results of each ROE model from my
13 Direct Testimony (Exhibit No.__(DCP-1)) and my updates in this Surrebuttal Testimony
14 (Exhibit No.__(DCP-2)). This schedule also averages the differences in each model results
15 between the two sets of analyses. The differences in the ROE model results can be
16 summarized as follows:

17

18 DCF	0.0%
19 CAPM	0.0%
20 CE	-0.3%
21 RP	+-0.2%
22 Average	1.0%

23

24 Collectively, these updated results indicate no change in the ROE of APS. My ROE
25 recommendation for APS thus remains 9.4 percent.

26
27 **Q. Does this conclude your Surrebuttal testimony?**

28 A. Yes, it does.

³⁵ Bulkley Rebuttal Testimony at 19: footnote 20.

BEFORE THE ARIZONA CORPORATION COMMISSION

ROBERT "BOB" BURNS

Chairman

BOYD DUNN

Commissioner

SANDRA D. KENNEDY

Commissioner

JUSTIN OLSON

Commissioner

LEA MÁRQUEZ PETERSON

Commissioner

IN THE MATTER OF THE APPLICATION OF)
ARIZONA PUBLIC SERVICE COMPANY FOR A)
HEARING TO DETERMINE THE FAIR VALUE OF)
UTILITY PROPERTY OF THE COMPANY FOR)
RATEMAKING PURPOSES, TO FIX A JUST AND)
REASONABLE RATE OF RETURN THEREON, TO)
APPROVE RATE SCHEDULES DESIGNED TO)
DEVELOP SUCH RETURN)

DOCKET NO. E-01345A-19-0236

SURREBUTTAL

TESTIMONY

OF

DAVID E. DISMUKES, PH.D.

ON BEHALF OF THE

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

DECMEBER 4, 2020

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EXECUTIVE SUMMARY
ARIZONA PUBLIC SERVICE COMPANY
DOCKET NO. E-01345A-19-0236

The purpose of my testimony is to respond to elements of the Rebuttal Testimonies of Jessica E. Hobbick and Brad J. Albert on behalf of Arizona Public Service Company (“APS” or “Company”). I will also address elements of the Direct Testimony of Amanda M. Alderson on behalf of the Federal Executive Agencies (“FEA”).

RESPONSE TO APS

APS states that it supports streamlining its residential retail rate offerings and proposes to modify its original residential rate proposal to now offer customers three choices: one flat rate; one time of use (“TOU”) rate; and one demand-based rate.

While I support the Company’s general position to simplify residential rate offerings, I believe there are important benefits that could arise by retaining two demand-based rate offerings for residential customers. Wide-scale residential demand rate offerings are still relatively new and switching to such a rate can potentially create significant impacts to customer’s rates and bills. My proposed R-2 demand-based rate are set at 50 percent of total demand-related cost of service. My R-2 rate proposal provides an important hybrid between recovering demand-related costs through energy charges, as traditional two-part tariffs do, and R-3 which I propose to represent a demand rate with the corresponding demand charge set at full cost of service.

APS does not support my proposal to reduce the number of on-peak hours associated with residential TOU rates, stating that the Company’s resource adequacy and reliability requirements are driven by an analysis of the top 90 hours in a year based on load requirements. The Company states that all 90 hours fall between hours ending at 2 p.m. and 9 p.m., demonstrating that the on-peak window should be wider than currently utilized for ratemaking purposes, though the Company states it offers the current five-hour window to accommodate customer convenience.

The Company’s analysis of net loads supports that it expects peak loads fall during the hour ending at 6:00 p.m., with the surrounding hours ending at 5:00 and 7:00 p.m. having the next highest load hours on the Company’s system. Likewise, the Company’s histogram distribution of its expected top 90 hours in 2021 shows that a plurality of these events are expected to fall during the two-hour period 5:00 p.m. to 7:00 p.m., totaling 41 of 90 hours (45.6 percent). This supports my proposed three-hour on-peak window, 4:00 to 7:00 p.m., would capture 57 of the Company’s top 90 load hours for 2021, or 63 percent of the Company’s top 90 hour expected loads.

The Company also states that, while it understands that the inclusion of the proposed super off-peak period may be perceived as making its residential demand rate more complicated, it believes that the potential benefits of including this additional rate element outweighs simplicity concern and points to observed increases in energy consumed during this off-peak period, under its R-TOU-E rate, as support for this conclusion.

However, the Company's data only shows a small 0.9 percent increase in use during this super off-peak period. Further, the referenced increase in electric usage is ultimately irrelevant since TOU rates should be designed to discourage use during on-peak periods, with reduced rate off-peak periods used to encourage customers to shift use to these hours from its on-peak periods. The Company has not provided information showing the extent or even if this increase in use during the referenced super off-peak period reduced use during on-peak periods (i.e. is the result of load shifting and not simple total load growth).

Finally, the Company criticizes my proposed changes to residential rates, noting that the impacts of their proposed adoption would produce a broad range of bill impacts if adopted in their totality. Specifically, the Company states that impacts can range from a 10 percent reduction to a 50 percent increase in base rates. However, even the Company's analysis shows that under my proposed rate design, the majority of residential customers will see future base rates that are lower than current, or at most 2.5 percent higher, consistent with the average base rate impact for the residential customer class under Staff's recommendation.

1 **INTRODUCTION**

2 **Q. Please state your name.**

3 A. My name is David E. Dismukes.

4
5 **Q. Are you the same David E. Dismukes who filed Direct Testimony in this proceeding**
6 **on October 9, 2020, on behalf of Staff?**

7 A. Yes, I am.

8
9 **Q. What is the purpose of your Surrebuttal Testimony?**

10 A. The purpose of my Surrebuttal Testimony is to respond to elements of the Rebuttal
11 Testimonies of Jessica E. Hobbick and Brad J. Albert on behalf of Arizona Public Service
12 Company ("APS" or "Company"). I will also address elements of the Direct Testimony of
13 Amanda M. Alderson on behalf of the Federal Executive Agencies ("FEA").

14
15 **SUMMARY OF RECOMMENDATIONS**

16 **Q. Has your review of parties' testimony caused you to revise any of your**
17 **recommendations in this proceeding?**

18 A. No. I continue to support the recommendations discussed in my Direct Testimony.

19
20 **RESPONSE TO APS**

21 *Residential Demand Rates*

22 **Q. Please summarize APS's rebuttal testimony regarding your residential rate design**
23 **proposals.**

24 A. APS states that it supports the desire to streamline residential rate offerings to enhance the
25 ability of customers to distinguish between rates and choose the rate that best suits them.¹

¹ Rebuttal Testimony of Jessica E. Hobbick, at 7:15-16.

1 APS offers customers three choices: one flat rate, one time of use ("TOU") rate, and one
2 demand-based rate.² APS recommends freezing R-2 (Saver Choice Plus), while keeping
3 R-3 (Saver Choice Max) to streamline its rates to only one demand rate.³
4

5 **Q. Do you support APS's proposal to freeze R-2?**

6 A. No. While I support the Company's general position to simplify residential rate offerings,
7 I believe there are important benefits that could arise by retaining two demand-based rate
8 offerings for residential customers. Wide-scale residential demand rate offerings are still
9 relatively new and switching to such a rate can potentially create significant impacts to
10 customer's rates and bills. The R-2 demand-based rate I proposed in my Direct Testimony
11 will establish demand rates that are 50 percent of total demand-related cost of service. This
12 provides an important hybrid between recovering demand-related costs through energy
13 charges, as traditional two-part tariffs do, and R-3 which I propose to represent a demand
14 rate with the corresponding demand charge set at full cost of service.
15

16 *Proposed Change to Residential On-Peak Hours*

17 **Q. Does the Company support reducing the number of on-peak hours associated with**
18 **residential TOU rates?**

19 A. No. The Company claims that new resource capacity costs are driven by a limited number
20 of high load hours during summer months.⁴ The Company provides a representative net
21 load curve for the Company and associated wholesale market prices for a representative
22 expected day in July of 2021.⁵ The Company also states that its resource adequacy and
23 reliability requirements are driven by an analysis of the top 90 hours in a year based on

² *Id.* at 8:1-3.

³ *Id.* at 8:3-6.

⁴ Rebuttal Testimony of Brad J. Albert, at 21:16-17.

⁵ *Id.* at 22:6-19.

1 load requirements.⁶ The Company states that all hours fall between hours ending at 2 p.m.
2 and 9 p.m.⁷ The Company argues that these analyses show that the on-peak window for
3 the Company is wider than it currently utilizes for ratemaking purposes, but that it offers
4 the current five-hour window to accommodate customer convenience.⁸

5
6 **Q. Does the Company specifically respond to your request that the on-peak TOU window**
7 **be shortened to 4:00 p.m. to 7:00 p.m.?**

8 A. Yes. The Company argues that only 63 percent of the Company's top 90 hours fall within
9 this three-hour window.⁹ The Company argues that net loads on its system are still
10 significant from 3:00 p.m. to 4:00 p.m. and from 7:00 p.m. to 8:00 p.m., and that it is
11 important for the Company to manage loads during these periods.¹⁰ The Company
12 furthermore states that its loads are shifting to later in the day, and that it expects this trend
13 to continue with additions of distributed solar resources on its system.¹¹

14
15 **Q. Do you agree that the Company's analysis supports its argument of retaining the**
16 **existing five-hour on-peak pricing regimen?**

17 A. No. The Company's presentation of net loads expected for an average July 2021 day shows
18 that the Company expects its peak load to fall during the hour ending at 6:00 p.m.¹²
19 Likewise the surrounding hours ending 5:00 p.m. and 7:00 p.m. are expected to capture the
20 next highest load hours on the Company's system. Therefore, from this analysis my
21 proposed three-hour on-peak window would capture the top three hours of load expected
22 by the Company. Likewise, the Company's histogram distribution of its expected top 90

⁶ *Id.* at 22:23-26.

⁷ *Id.* at 23:2-3.

⁸ *Id.* at 23:3-5.

⁹ *Id.* at 24:14-15.

¹⁰ *Id.* at 24:16-19.

¹¹ *Id.* at 25:7-13.

¹² *Id.* at 22:10-19.

1 hours in 2021 shows that a plurality of these events are expected to fall during the two-
2 hour period 5:00 p.m. to 7:00 p.m., totaling 41 of 90 hours (45.6 percent).¹³ The next
3 highest occurrence being for the period 4:00 p.m. to 5:00 p.m. is expected to capture 16 of
4 the Company's top 90 highest load hours. In total my proposed three-hour window of 4:00
5 to 7:00 p.m. would capture an expected 57 of the Company's top 90 load hours for 2021,
6 or the referenced 63 percent. The Company's analysis finds a significant drop-off in the
7 expected occurrence of high load hours after 7:00 p.m., and a moderate drop for hours
8 before 4:00 p.m.

9
10 Addition of Super Off-Peak Rate

11 **Q. Does the Company continue to support the creation of a super off-peak rate for**
12 **residential demand rate R-3?**

13 A. Yes. The Company states that while it understands that the inclusion of the proposed super
14 off-peak period may be perceived as making the rate slightly more complicated, it believes
15 that the potential benefit outweighs this concern.¹⁴ Specifically, the Company notes that
16 the addition of the super off-peak period to its R-TOU-E rate increased the total amount of
17 energy consumed during super off-peak period from 17.8 to 18.7 percent of total energy
18 use.¹⁵

19
20 **Q. Do you find the Company's argument convincing?**

21 A. No. The referenced increase represents an increase of only 0.9 percent, and is not
22 substantial, a point even the Company recognizes.¹⁶ Furthermore, the referenced increase
23 in electric usage is ultimately irrelevant. TOU rates should be designed to discourage use
24 during on-peak periods, with reduced rate off-peak periods used to encourage customers to

¹³ *Id.* at 23:8-16.

¹⁴ Rebuttal Testimony of Jessica E. Hobbick at 32:22-24.

¹⁵ *Id.* at 32:17-20.

¹⁶ *Id.* at 32:20-22.

1 shift use to these hours from its on-peak periods. Likewise, demand-based rates should be
2 designed to encourage higher load factors, or more consistent use across time periods. The
3 Company has not provided information showing the extent or even if this increase in use
4 during the referenced super off-peak period reduced use during on-peak periods (i.e. is the
5 result of load shifting and not simple total load growth). Based on the limited impact the
6 Company has found for load growth during super off-peak periods for R-TOU-E, it is
7 doubtful that the introduction of this rate element has led to significant load shifting from
8 on-peak hours.

9
10 Estimated Bill Impacts

11 **Q. Does the Company criticize the impact to customers from your proposed changes to**
12 **residential rates?**

13 A. Yes. The Company states that the impact of adopting my proposed changes to residential
14 rate design would produce a broad range of bill impacts if adopted in their totality.¹⁷ The
15 Company states that these impacts can range from a 10 percent reduction in current base
16 rates to a 50 percent increase in base rates.¹⁸

17
18 **Q. Do you agree with the Company's criticism?**

19 A. No. It is impossible to design rates that will be beneficial to all individual customers due
20 to the inherent heterogeneity in customer use, even among similarly situated customers
21 within a rate tariff. The Company's analysis shows that the majority of residential
22 customers will see future base rates that are lower than current, or at most 2.5 percent
23 higher. With regards to this last point, it should be recognized that the Company proposes
24 a net increase to base rates of 2.2 percent, meaning at least half of customers will see
25 benefits over existing rate structures. The Company states that residential customer bill

¹⁷ *Id.* at 33:3-9.

¹⁸ *Id.* at 33:10-20.

1 impacts could be as much as a 50 percent increase in base rates, but the Company's own
2 analysis shows that this would only be true for one percent of current customers.

3
4 **Q. Can some of the larger bill impacts be explained?**

5 A. Yes. The Commission should recognize that the Company's analysis assumes customers
6 take service from the Company under their current tariff. These customers likely represent
7 customers taking service on inappropriate service tariffs and will have the option to change
8 service to a rate structure that better matches their usage profile. Specifically, all customers
9 will have the option of taking service through two demand rates, and TOU rates under my
10 proposed changes. Customers with average monthly usage less than 1,000 kWh a month
11 will be able to receive service under flat energy rates under my proposed changes.

12
13 **CONCLUSIONS AND RECOMMENDATIONS**

14 **Q. Has your review of parties' testimony caused you to revise any of your**
15 **recommendations in this proceeding?**

16 A. No. I continue to support the recommendations discussed in my Direct Testimony.

17
18 **Q. Does this conclude your Surrebuttal Testimony?**

19 A. Yes, it does.

BEFORE THE ARIZONA CORPORATION COMMISSION

ROBERT "BOB" BURNS
Chairman
BOYD DUNN
Commissioner
SANDRA D. KENNEDY
Commissioner
JUSTIN OLSON
Commissioner
LEA MÁRQUEZ PETERSON
Commissioner

IN THE MATTER OF THE APPLICATION OF)	DOCKET NO. E-01345A-19-0236
ARIZONA PUBLIC SERVICE COMPANY FOR)	
A HEARING TO DETERMINE THE FAIR)	
VALUE OF THE UTILITY PROPERTY OF)	
THE COMPANY FOR RATEMAKING)	
PURPOSES, TO FIX A JUST AND)	
REASONABLE RATE OF RETURN)	
THEREON, TO APPROVE RATE SCHEDULES)	
<u>DESIGNED TO DEVELOP SUCH RETURN.)</u>	

SURREBUTTAL

TESTIMONY

OF

MARGARET (TOBY) LITTLE

ELECTRIC UTILITIES CONSULTANT

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

DECEMBER 4 2020

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EXECUTIVE SUMMARY
ARIZONA PUBLIC SERVICE COMPANY
DOCKET NO. E-01345A-19-0236

Margaret (Toby) Little's Surrebuttal Testimony presents the Arizona Corporation Commission ("ACC" or "Commission") Utilities Division Staff's ("Staff") engineering review and response to Arizona Public Service Company's ("APS" or "Company") Rebuttal Testimony in APS's rate case filed with the Commission (Docket No. E-01345A-19-0236).

APS filed Rebuttal Testimony in this case on November 6, 2020. Ms. Little's testimony is Staff's response to Mr. Jacob Tetlow's Rebuttal to Mr. Gurudatta Belavadi's Direct Testimony, filed on October 2, 2020, presenting Staff's engineering review, conclusions and recommendations. Mr. Belavadi is no longer with the Commission and Ms. Little adopts his Direct Testimony as if it were her own. In his Rebuttal Testimony, Mr. Tetlow states that APS does not support the recommended reliability targets for SAIFI and SAIDI; that APS has not found a strong correlation between data relative to age and heat impacts on equipment that warrants implementation of Staff's recommended targeted excessive heat impact and transformer failure tracking program; and that APS does not support all of the detailed recommendations for annual reporting requirements included in Mr. Belavadi's Direct Testimony. Mr. Tetlow suggests an alternative format for annual data sharing, which he claims is less burdensome than Mr. Belavadi's recommendations.

In her testimony, Ms. Little elaborates on Staff's reasons for its original recommendations and reiterates that Staff believes the recommendations presented in Mr. Belavadi's Direct Testimony are reasonable and appropriate and recommends that the Commission adopt them.

1 **INTRODUCTION**

2 **Q. Please state your name, occupation, and business address.**

3 A. My name is Margaret (Toby) Little. I am employed by the Arizona Corporation
4 Commission ("ACC" or "Commission") as an Electric Utilities Consultant to the Utilities
5 Division ("Staff"). My business address is 1200 West Washington Street, Phoenix,
6 Arizona 85007.

7
8 **Q. Briefly describe your responsibilities as an Electric Utilities Consultant.**

9 A. Working as assigned on a case by case basis, I have performed engineering analyses for
10 financing and rate cases, coordinated and worked on Biennial Transmission Assessments,
11 reviewed utilities' load curtailment plans and summer preparedness plans, performed
12 engineering analyses for line siting cases, and given testimony before the Commission and
13 Line Siting Committee. In addition, I have provided consultations on local and regional
14 electric system activities, and have represented Commission Staff on various committees.

15
16 **Q. Please describe your educational background and professional experience.**

17 A. I received my Bachelor of Science in Electrical Engineering from New Mexico State
18 University in 1972, and my Master of Science in Electrical Engineering (Electric Utility
19 Management Program) in 1979, also from New Mexico State University. I have been a
20 Registered Electrical Engineer since 1980.

21
22 I have worked for the Commission as a state employee, then as a consultant for over ten
23 years. Prior to that, I had over 30 years of experience in the electrical engineering field,
24 working for San Diego Gas and Electric Company, Hawaiian Electric Company and
25 Anchorage Municipal Light and Power, and as a consultant with RW Beck and Associates,
26 a nationally recognized consulting firm. My experience includes working in and

1 supervising the system planning sections of electric utilities where I had responsibility for
2 distribution, transmission and resource planning as well as load forecasting. As a
3 consultant, I worked on transmission and resource plans for public utilities and performed
4 utility system analyses in support of financing.

5
6 **Q. What is the scope of your testimony in this case?**

7 A. The scope of my testimony is to present Staff's response to Mr. Jacob Tetlow's Rebuttal
8 to Mr. Gurudatta Belavadi's Direct Testimony, filed on October 2, 2020, which I am
9 adopting.

10
11 **APS OPERATIONS AND RELIABILITY**

12 **Q. Can you summarize Staff engineer, Guru Belavadi's recommendations?**

13 A. Yes:

- 14 1. Staff recommends that APS set its targets for SAIFI and SAIDI at 0.80 (number of
15 outages per year) and 75 minutes, respectively.
- 16
- 17 2. Staff recommends that within one year of a Decision in this case, APS docket a
18 report that details its load forecasts and actual power delivered from 2010 to 2020
19 and describe the reasons forecasts were inaccurate and what actions are being taken
20 to improve its forecasts year-over-year.

- 1 3. Staff recommends that APS submit a report annually, beginning one year from the
2 date of the Decision in this case, to Staff that includes: its system-wide Reliability
3 Indices (“RI”); the RI disaggregated by division and district; actions taken to
4 improve its RI; a summary of reliability programs that are in place to improve its
5 RI; and a summary of projects and facilities, and their costs, placed into service that
6 aim to improve reliability.
7
- 8 4. Staff recommends that within one year of a Decision in this case, APS develop and
9 implement a program(s) that investigates the impact of excessive heat on the outage
10 root causes listed in Table 10, and specifically targets reductions in frequency and
11 duration of outages that occur in areas susceptible to excessive heat. Furthermore,
12 Staff recommends that APS file a summary of the results of this program(s)
13 annually, as a compliance item in this docket.
14
- 15 5. Staff recommends that APS be directed to meet with Staff annually to provide an
16 overview of its strategies to reduce outages in its Metro, Northeast, and Northwest
17 divisions.
18
- 19 6. Staff recommends APS expand its Transformer Failure Tracking program to track
20 the service life of the transformers at the time of failure, investigate the higher
21 transformer failure rate during the summer months and implement proactive
22 measures to reduce the same.
23

1 **Q. Did you review Jacob Tetlow's Rebuttal Testimony on behalf of APS regarding "APS**
2 **Operations and Reliability?"**

3 A. Yes.

4
5 **Q. Can you briefly summarize Mr. Tetlow's Rebuttal Testimony on behalf of APS**
6 **regarding Mr. Belavadi's recommendations?**

7 A. Yes. Mr. Tetlow states that:

8
9 1. APS does not support the recommended reliability targets for SAIFI and SAIDI
10 (Mr. Belavadi's recommendation No. 1).

11
12 2. APS has not found a strong correlation between data relative to age and heat
13 impacts on equipment that warrants implementation of Staff's recommended
14 targeted excessive heat impact and transformer failure tracking program (Mr.
15 Belavadi's recommendation No. 4 and No. 6).

16
17 3. APS does not support all of the detailed recommendations for annual reporting
18 requirements included in Staff's testimony and, instead, suggests an alternative
19 format for annual data sharing, which is less burdensome (Mr. Belavadi's
20 recommendation No. 3 and No. 5).

21

RELIABILITY TARGETS

Q. Can you further explain Staff's position regarding reliability targets for SAIFI and SAIDI?

A. As stated in Mr. Belavadi's testimony, in APS's previous rate case, Staff recommended a SAIDI target of 75 minutes and SAIFI target of 0.80 "due to the evident emphasis that APS places on maintaining a superior system performance and projects listed by APS that are being implemented by June 30, 2017". Staff recognized the significant capital APS was investing to maintain and improve reliability and further stated "all of these efforts come at significant costs so the customers and the Commission should expect superior service and reliability in the future." Staff continues to recognize that APS's capital spending on projects intended to maintain or improve reliability comes at a significant cost and therefore, believes that customers, Staff and the Commission should expect superior service and reliability.

Mr. Tetlow states that setting additional and more stringent externally developed targets can have unintended negative consequences. Instead, Mr. Tetlow states benchmarking as a more widely regarded acceptable method to analyze performance.

Staff appreciates APS's current target-setting process as explained by Mr. Tetlow. In fact, Staff reviewed benchmarked data and concluded that the Company's service reliability data is consistent with that of other utilities. However, when reviewing APS's reliability data over the 2013-2019 period, outage durations have not improved in a meaningful way. In the spirit of continuous improvement, Staff believes APS's target-setting process should include benchmarking the utility against itself. Staff's recommended targets for SAIFI and SAIDI (at 0.80 and 75 minutes, respectively) are targets, not mandates. Staff believes these values should be objects of attention for APS to aim toward as it continues with capital

1 spending on projects intended to maintain or improve reliability. These projects come at a
2 significant cost, and given this, customers, Staff and the Commission expect superior
3 service and reliability.

4
5 Staff is monitoring APS's service reliability trends and associated investments and believes
6 this is a topic of interest to the Commission. These targets indicate a desire from Staff to
7 see the Company adopt clear goals that encourage continuous improvement; with the
8 understanding that if targets are or are not reached, Staff expects that APS would provide
9 a reasonable explanation as to why. Ultimately, Staff believes these explanations, and
10 associated information, would help keep Staff and the Commission informed regarding
11 APS's future investment in plant items and APS's changes in operations.

12
13 Mr. Tetlow states that, "Given APS's expansive and diverse service territory, external
14 setting of reliability targets could diminish the Company's ability to dynamically manage
15 operational risk and system reliability based on the unique circumstances that may change
16 or develop throughout a given year or over years."

17
18 Staff does not believe the recommended targets diminish the Company's ability to manage
19 its operational risk and system reliability. Ultimately, APS is responsible for providing
20 safe and reliable service to its customers and has the management discretion to take action
21 to ensure safe and reliable service. Therefore, in the event that Staff's recommended targets
22 are adopted, Staff expects that APS would provide a reasonable explanation for why it did
23 or did not meet the targets.

24
25 Mr. Tetlow also states that, "Externally set targets may drive unintended system or
26 customer affordability consequences by placing unnecessary pressure on system

1 performance without validation of other variable factors and cost control mechanisms. For
2 that reason, APS does not recommend setting new targets that do not account for
3 environmental variability or the careful balance of investment to maintain customer
4 affordability paired with reliability.”

5
6 Staff expects APS to strive toward continuous improvement in its service quality while
7 balancing customer affordability. Staff does not believe the recommended targets diminish
8 APS’s management discretion to take action to balance customer affordability. Therefore,
9 regardless of whether Staff’s recommended targets are adopted, Staff expects that future
10 discussions of reliability metrics should include information from the Company related to
11 environmental variability and the Company’s “careful balance of investments to maintain
12 customer affordability paired with reliability.”

13
14 **REPORTING REQUIREMENTS**

15 **Q. Can you discuss Staff’s position regarding the “careful balance of investments to**
16 **maintain customer affordability” as it relates to reliability?**

17 **A.** Yes. Staff would like to understand how the Company is making investments to maintain
18 customer affordability as it relates to reliability. In fact, this is the basis for Staff’s
19 recommendation that APS submit a report annually to Staff that includes: system-wide
20 reliability indices (“RI”), a summary of reliability programs that are in place to improve its
21 RI; and a summary of projects and facilities, and their costs, placed into service that aim to
22 improve reliability. In addition, Staff recommends that APS file an overview of its
23 strategies to reduce outages in the Metro, Northeast and Northwest divisions.

24
25 Mr. Tetlow states that APS has the “eighth largest geographic footprint of any U.S. utility”
26 and APS has an “expansive service territory.” This is precisely why annual reporting

1 would be beneficial to customers, Staff, and the Commission. Regular annual detailed
2 filings, as recommended by Staff, would help keep interested stakeholders informed with
3 regard to how APS is investing in reliability and what service quality customers are getting
4 in return for that investment.

5
6 **EXCESSIVE HEAT AND TRANSFORMER FAILURES**

7 **Q. Can you further explain Staff's position regarding targeted excessive heat impact and**
8 **transformer failure tracking program?**

9 A. Yes, however it is important to discuss these recommendations separately as the
10 Company's testimony appeared to tie these programs together.

11
12 First, as stated in Mr. Belavadi's testimony, "Staff notes that Summer 2020 in Arizona was
13 warmer than usual and broke several records, including hottest summer, most 90-degree
14 nights, most 110-degree days, and more excessive heat warnings for Phoenix, to name a
15 few. Staff believes that excessive heat could impact some of the root cause categories
16 mentioned in Table 10 and could potentially be a factor for an increase in the number of
17 outages experienced by customers. In addition, the frequency and duration of outages that
18 occur during times of excessive heat should be minimized with great effort."

19
20 In review of Mr. Tetlow's rebuttal testimony, it is not clear whether APS supports this
21 recommendation, but Staff would like APS to provide more clarity. Staff believes APS
22 should focus on reducing the frequency and duration of outages that occur in areas
23 susceptible to excessive heat *in addition* to work undertaken to investigate the impact of
24 excessive heat on the outage root causes listed in Table 10 of Mr. Belavadi's Direct
25 Testimony.
26

1 In Mr. Tetlow's testimony, he states "the Company has not discovered any strong
2 correlation between transformer age and impacts of heat to warrant a more targeted
3 approach to addressing these impacts." Staff believes it is imperative that APS develop
4 and implement a program(s) that investigates the impact of excessive heat on the outage
5 root causes listed in Table 10 of Mr. Belavadi's Direct Testimony.

6
7 Secondly, from Staff's understanding, APS is implementing a "Transformer Failure
8 Tracking" program . In Staff's analysis, it was determined that APS does not track the age
9 of the transformers at the time of failure. Staff believes that APS should track this metric
10 as well as others to investigate reasons for the higher transformer failure rate during the
11 summer months and implement proactive measures to reduce the same.

12
13 **CONCLUSIONS**

14 **Q. Please reiterate Staff's position regarding the recommendations presented in Mr.**
15 **Belavadi's Direct Testimony.**

16 A. Staff believes the recommendations presented in Mr. Belavadi's Direct Testimony are
17 reasonable and appropriate and recommends that the Commission adopt them.

18
19 **Q. Does this conclude your testimony?**

20 A. Yes.

BEFORE THE ARIZONA CORPORATION COMMISSION

ROBERT “BOB” BURNS

Chairman

BOYD DUNN

Commissioner

SANDRA D. KENNEDY

Commissioner

JUSTIN OLSON

Commissioner

LEA MÁRQUEZ PETERSON

Commissioner

IN THE MATTER OF THE APPLICATION OF) DOCKET NO. E-01345A-19-0236
ARIZONA PUBLIC SERVICE COMPANY FOR)
A HEARING TO DETERMINE THE FAIR)
VALUE OF THE UTILITY PROPERTY OF)
THE COMPANY FOR RATEMAKING)
PURPOSES, TO FIX A JUST AND)
REASONABLE RATE OF RETURN)
THEREON, TO APPROVE RATE SCHEDULES)
DESIGNED TO DEVELOP SUCH RETURN. _____)

SURREBUTTAL

TESTIMONY

OF

MATT CONNOLLY

EXECUTIVE CONSULTANT III

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

DECEMBER 4, 2020

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EXECUTIVE SUMMARY
ARIZONA PUBLIC SERVICE COMPANY
DOCKET NO. E-01345A-19-0236

On behalf of the Arizona Corporation Commission (“ACC” or “Commission”) Utilities Division Staff (“Staff”), Mr. Matt Connolly’s Surrebuttal Testimony responds to Arizona Public Service Company’s (“APS”) witness’ comments regarding proposed disclaimers for the rate comparison tool. Additionally, Staff supports the adoption of the proposed changes to the current APS’s Plan Names as detailed in Commission Staff Rate Design Testimony filed on October 9, 2020.

INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My name is Matt Connolly. I am an Executive Consultant III employed by the Arizona Corporation Commission (“ACC” or “Commission”) in the Utilities Division (“Staff”). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Are you the same Matt Connolly who filed Direct Testimony in this proceeding on October 2, 2020, as a member of Staff?

A. Yes, I am.

Q. What is the purpose of your Surrebuttal testimony?

A. The purpose of this Surrebuttal Testimony is to respond to the Rebuttal Testimony of Arizona Public Service Company (“APS”) witness Ms. Jessica Hobbick where it is focused on proposed disclaimers to improve the rate comparison tool as well as to comment on proposed changes to rate plan names.

RATE COMPARISON TOOL DISCLAIMERS

Q. What are the rate comparison tool disclaimers?

A. To review, as I previously stated in my Direct Testimony, as a result of its investigation and analysis, energytools proposed APS implement five (5) recommended disclaimers related to the usage of the rate comparison tool. My testimony recommended all five be implemented by APS but Ms. Hobbick did not believe the following two (2) are necessary:

1. Ratepayer forecasts are established based on average usage; therefore, consumers should be informed that any considerable changes in their actual usage cannot possibly be accounted for by the new rate comparison web tool.

4. Rate tool recommendations are based on normal weather patterns and, as a result, any statistically uncommon weather patterns cannot be forecasted and considered when determining a most economical rate plan.

Q. What is Staff's response to Ms. Hobbick's comment that the following proposed energytools disclaimer is "not appropriate because the rate comparison tool uses actual customer historical usage to calculate what the bills would have been on each alternative plan."?

A. To recap, below is the proposed disclaimer (#1) proposed by energytools and which Staff is supporting be implemented by APS:

1. Ratepayer forecasts are established based on average usage; therefore, consumers should be informed that any considerable changes in their actual usage cannot possibly be accounted for by the new rate comparison web tool.

Staff is not disputing that the rate comparison tool uses actual historical usage in its calculations and believes it is appropriate for the tool to do so. However, Staff also believes that it is important for customers to understand that looking at past usage may not be indicative of what future energy usage may be. For example, an increase or decrease in household members may be an unusual historical event that might have impact on usage and therefore what plan the tool might suggest the customer select. The disclaimer is simply a way for customers to be aware and make more informed decisions.

However, to address what appears to be some confusion on this matter, Staff proposes a clarified version of this disclaimer to look as follows:

1. ~~Ratepayer forecasts are established based on average usage;~~ **The rate comparison tool is based on actual historical usage,** therefore, consumers should be informed that any considerable changes in ~~their actual usage~~ **the future** cannot possibly be accounted for by the ~~new~~ rate comparison web tool.

1 **Q. What is Staff's response to Ms. Hobbick's comment that the following proposed**
2 **Energytools disclaimer is not necessary as "the tool uses actual historical usage"?**

3 A. Again, to recap, below is the proposed additional disclaimer (#4) proposed by energytools
4 and which Staff is supporting be implemented by APS:

- 5
6 4. Rate tool recommendations are based on normal weather patterns
7 and, as a result, any statistically uncommon weather patterns cannot
8 be forecasted and considered when determining a most economical
9 rate plan.

10
11 Again, Staff is not disputing that the rate comparison tool uses actual historical usage in its
12 calculations. However, it is important for customers to be aware that unusual past or future
13 weather events might have impact on usage. The disclaimer is another way for APS to
14 heighten awareness and educate customers to make more informed decisions.

15
16 **RATE PLAN NAMES**

17 **Q. What are Staff's recommendations regarding changes to APS's rate plan names?**

18 A. After review of the Rate Design Testimony filed on October 9, 2020, on behalf of Staff,
19 specifically the section found on page 46 entitled Adopt Names for the Residential Rates
20 that are Easier-to-Understand, Staff is in support of Commission adoption of the
21 recommendations found in that section. Specifically, as taken directly from that testimony,
22 those recommendations are the following:

- 23
24 1. Brand names should effectively communicate the service that is being
25 provided through the tariffed rate,
26
27 2. Brand names should effectively communicate the feature or features that
28 distinguish the rate in question from other rate options available to
29 customers,
30
31 3. Branded names should be effectively descriptive yet easy to understand.

1 **Q. Are you recommending that APS file its new rate plan names that meet these criteria**
2 **in its Rejoinder Testimony?**

3 A. Yes. This will allow parties and the Commission to comment on the names selected and
4 whether they meet the identified criteria.

5
6 **Q. Does this conclude your Surrebuttal Testimony?**

7 A. Yes.